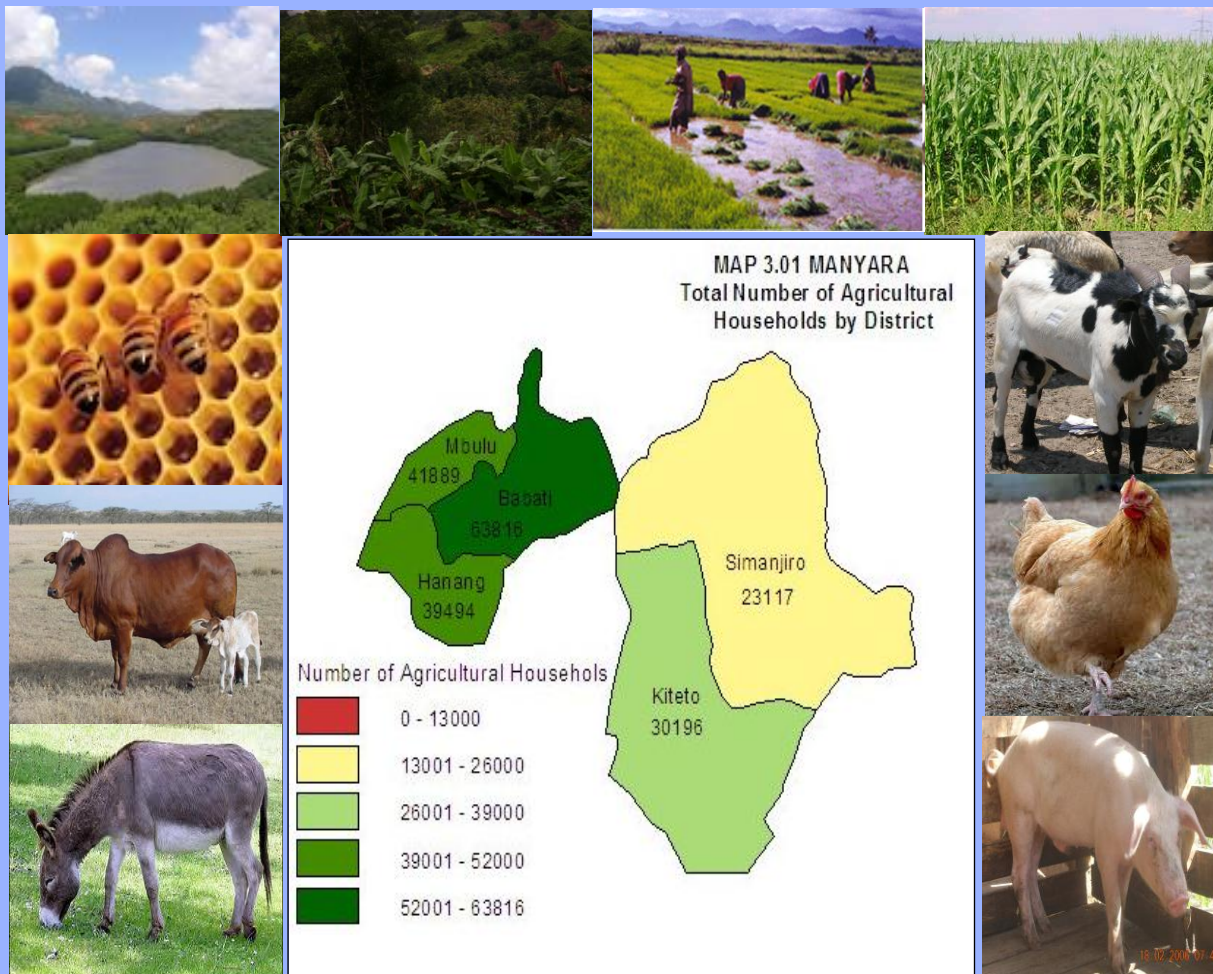




The United Republic of Tanzania

NATIONAL SAMPLE CENSUS OF AGRICULTURE 2007/2008

VOLUME Vii: REGIONAL REPORT: MANYARA REGION



Ministry of Agriculture, Food Security and Cooperatives; Ministry of Livestock Development and Fisheries; Ministry of Water and Irrigation; Ministry of Agriculture, Livestock and Natural Resources, Zanzibar; Prime Minister's Office, Regional Administration and Local Governments; Ministry of Industries, Trade and Marketing; The National Bureau of Statistics and the Office of the Chief Government Statistician, Zanzibar.

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ACRONYMS

ASDP	Agricultural Sector Development Programme
CSPro	Census and Survey Processing Program
CSTWG	Censuses and Surveys Technical Working Group
DADIPS	District Agricultural Development and Investment Projects
DADO	District Agricultural Development Officer
DfID	Department for International Development
DIAS	District Integrated Agricultural Survey
DS	District Supervisor
EAS	Expanded Agricultural Survey
EAs	Enumeration Areas
EU	European Union
FE	Field Enumerator
GDP	Gross Domestic Product
GIS	Geographical Information System
ha	Hectares
hh	Household
IAS	Integrated Agricultural Survey
ICR	Intelligent Character Recognition
ID	Identity
IEC	Information, Education and Communication
JICA	Japanese International Cooperation Agency
LRS	Long Rainy Season,
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MIT	Ministry of Industry and Trade
MLFD	Ministry of Livestock and Fisheries Development
NBS	National Bureau of Statistics
NGO	Non Governmental Organization
NMS	National Master Sample
NSCA	National Sample Census of Agriculture
NSGRP	National Strategy for Growth and Reduction of Poverty (MKUKUTA)
OCGS	Office of Chief Government Statistician Zanzibar

PMO-RALG	Prime Minister's Office, Regional Administration and Local Government
PPS	Probability Proportional to Size
PSU	Primary Sampling Unit
RS	Regional Supervisor
RSM	Regional Statistical Manager
SPSS	Statistical Package for Social Science
SRS	Short Rainy Season
TOT	Training of Trainers
UNDP	United Nations Development Programme
UNFAO	United Nations Food and Agriculture Organization

PREFACE

At the end of the 2007/08 Agricultural Year, the National Bureau of Statistics (NBS) in collaboration with the Ministries of Agriculture, Food Security and Cooperatives, Livestock and Fisheries Development; Water; Industry and Trade; the Prime Minister's Office, Regional Administration and Local Government (PMORALG) and the Office of the Chief Government Statistician, (OCGS), Ministries of Agriculture and Natural Resources; Livestock and Fisheries conducted the Agricultural Sample Census. This is the fourth Agricultural Census to be carried out in Tanzania, the first one was conducted in 1971/72, the second in 1993/94 and 1994/95 (during 1993/94 data on household characteristics and livestock count were collected and data on crop area and production in 1994/95), and the third was conducted in 2002/03.

The census collected detailed data on crop production, crop marketing, crop storage, livestock production, fish farming, and poverty indicators. In addition to this, the census was large in its scope and coverage as it provides data that can be disaggregated at district level and thus, allow comparisons with the 2007/08 National Sample Census of Agriculture. The census covered smallholders in rural areas only and large scale farms. This report presents data disaggregated at regional and district level and it focuses on small holders crop production and livestock keeping.

The extensive nature of the census in relation to its scope and coverage is a result of the increasing demand for more detailed information to assist in the proper planning of the agricultural sector and in the administrative decentralization of planning to district level. It is hoped that this report will provide new insights for planners, policy makers, researchers and others involved in the agricultural sector in order to improve the prevailing conditions faced by agricultural households in the country.

On behalf of the Government of Tanzania, I wish to express my appreciation for the financial support provided by the development partners, in particular, the Department for International Development (DfID) and the Japanese Government through the Japan International Cooperation Agency (JICA) and others who contributed through the pooled fund mechanism.

My appreciation also goes to all those who in one-way or the other have contributed to the success of the census. In particular, I would also like to mention the enormous effort made by the Planning

Group composed of professionals from the Agriculture Statistics Department of the National Bureau of Statistics, Ministry of Agriculture, Food Security and Cooperatives, Ministry of Livestock Development and Fisheries, Ministry of Water and Irrigation, Ministry of Agriculture, Livestock and Environment, Zanzibar, the Prime Minister's Office, Regional Administration and Local Government, Ministry of Industries, Trade and Marketing and the Office of the Chief Government Statistician, Zanzibar, the Food and Agriculture Organization of the United Nations and the Censuses and Surveys Technical Working Group (CSTWG).

Finally, I would like to extend my sincere gratitude to all the professionals, the consultants, Regional and District Supervisors and field enumerators for their commendable work. Certainly without their dedication, the census would not have been successful.

Dr. Albina A. Chuwa
Director General
National Bureau of Statistics

EXECUTIVE SUMMARY

The executive summary highlights the main survey results obtained during the National Sample Census of Agriculture 2007/08. This report covers small-scale agriculture households in rural areas of Manyara region that were selected using statistical sampling techniques. The results in the report do not cover urban areas and large-scale farmers. The highlights describe the main findings in relation to agricultural production, productivity, husbandry, access to resources, levels of involvement in agricultural related activities and poverty in Manyara region and indicators for one to get an overview, at regional level, of the rural agricultural households and their levels of involvement in agricultural related activities.

i) Household Characteristics

The number of agricultural households in Manyara region was 198,513 out of which 132,677 (67%) were involved in crops as well as livestock production, 60,611 (30%) were involved in growing crops only, and 5,224 (3%) were involved in rearing livestock only. Most of the agricultural households ranked annual crop farming as an activity that provided most of their cash income followed by livestock keeping/herding.

The region had a literacy rate of 72 percent. The highest literacy rate was found in Babati was (77%), Mbulu 76 percent of the total population. This is followed by Hanang (70%), Kiteto (64%) and Simanjiro (62%). The literacy rate for the heads of households in the region was 100 percent. The number of heads of agricultural households with formal education in Manyara region was 363,230 (100.0%), those with University and other tertiary education were 600 (8%) and those with only adult education were 4,977 (71%). And for those whom neither of these categories was applicable were 1,458 household's heads representing 21 percent

ii) Crop Production**Land Area**

The total area of land available to smallholders was 608,088 ha. The regional average land area utilised for agriculture per household was only 3.1 ha. This figure was more than the national average which was estimated at 2.0 hectares.

Planted Area

The area planted with annual crops and vegetables was 396,459 hectares out of which 11,175 hectares (3%) were planted during short rainy season and 385,285 hectares (97%) during long rainy season.

iii) Crop Types

Cereal Production

An estimated area of 286,504 ha (72% of the total planted area with annual and vegetable crops) was planted with cereals, followed by pulses with 63,903 ha (16%), oil seeds (42,165 ha, 11%), roots and tubers (1,952 ha, 1%) and fruit and vegetables (954 ha, 0.2%). Cash crops had a planted area of about 982 ha (0.2%).

▪ Maize

Maize dominated the production of cereal crop in the region. The number of households growing maize in the region during the long rainy season was 182,128, (91.7% of the total annual crop growing households in the region during the long rainy season). The total production of maize during the long rainy season was 387,573 tonnes from a planted area of 256,163 hectares resulting in a yield of (1.5 t/ha). Other crops in order of their importance (based on area planted) are sunflower, wheat, sorghum, chick peas, paddy, finger millets, simsim, mung bean, green gram, cow peas, ground nuts, bulrush millet, and cotton.

The average area planted with maize per maize growing household ranged from 0.7 hectares in Mbulu District to 2.8 hectares in Kiteto District. Kiteto district had the largest planted area of maize (69,186 ha) followed by Babati (35,491 ha), Hanang (35,232 ha), Simanjiro (22,831 ha) and Mbulu (22,818 ha).

▪ Paddy

Paddy is the second most important cereal crop in the region in terms of cereal production. The number of households that grew paddy in Manyara region during the long rainy season was 2,826. This represented 1.4 percent of the total crop growing households in Manyara region. The total production of paddy during the long rainy season was 7,683 tonnes from a planted area of 2,192 hectares resulting in a yield of (3.5 t/ha). During the long rainy season paddy was produced in Babati and Simanjiro on land areas of 1,823 and 370 hectares respectively.

Oil Seeds

The total production of oilseed crops was 31,436 tonnes. The most cultivated oil seed crop was sunflower. The production for this crop was 2,638 tonnes, which constituted 93 percent of the total oil seeds production, followed by simsim (4.2%), and groundnuts (3%).

Fruits and vegetables

The total production of fruits and vegetables was 4,723 tonnes. The most cultivated fruit and vegetable crop was cabbage with the production of 2,383 tonnes (50.59% of the total fruit and vegetable production), followed by tomatoes (782 tonnes, 16.6%), onion (658 tonnes, 14%). The production of the other fruit and vegetable crops was relatively small accounting to less than ten percent of total fruit and vegetable production.

Permanent Crops

The area of smallholders planted area with permanent crops was 781,231 hectares which is 92 percent of the area planted with annual crops in the region. The most important permanent crop was pigeon peas which had a planted area of 38,407 ha, (96.2% of the total planted area of permanent crops in the region), followed by bananas (281 ha, 1%).

iv) Use of Inputs**Improved Seeds**

The planted area using improved seeds was estimated at 6,621 ha which represents 2 percent of the total area planted with the annual crops and vegetables. The percentage usage of improved seeds in the short rainy season was higher at 6.1 percent than the corresponding percentage for the long rainy season (1.5%).

Use of Fertilizers

The use of fertilizers on annual crops in Manyara region was very small with the application of fertilizers to a planted area of only 34,088 ha (8.1% of the total area planted with annual crops in the region). The planted area without fertilizer for annual crops was (385,414.4 hectares) representing (91.9 percent of the total planted area with annual crops). Of the planted area with fertilizer application, organic fertilizers was applied to 32,275 ha which represented 95 percent of the total planted area and Inorganic fertilizers was applied to (1,812 hectares) which represent (5 percent of the total planted area).

v) Irrigation

In Manyara region, the area of annual crops under irrigation was 7,347 ha representing 2 percent of the total area under irrigation in the region. The area under irrigation during the short rainy season was 1,971 ha accounting for 17.6 percent of the total area under irrigation. In the long rainy season, 5,375 hectares (1.4%) planted area with vegetables was irrigated.

vi) Crop Storage and Marketing**Crop Storage**

There were 14,019 crop growing households (7.1% of the total crop growing households in Manyara region) that stored various agricultural products in the region. Most crop growing households in the region store their produce in locally made traditional structures (158,742 households, 44% of households that stored crops in the region). This was closely followed by sacks and/or open drums (150,843 hh, 42%), improved locally made structures (used by 4,619 crops storing households (1%), and unprotected pile (used by 1,141 households, (1%). Other methods were minor and each represented less than 1 percent of the households that reported storing crops in the region; these were airtight drum and modern store. Eleven percent of the crops growing households reported not using any method of storing crops in the region.

Crop Marketing

The number of households that reported selling crops was 11,623 which represent 6.2 percent of the total number of crops growing households. The percent of crop growing households selling crops was highest in Babati and Mbulu (i.e. 5,213 and 3,620, which is 8.9 percent for both) followed by Hanang (5.2%) and Simanjiro (4%). No one reported to have sold crops in Kiteto district.

vii) Agricultural Credit

In Manyara region very few agricultural households (5,551, 2.8%) accessed credit out of which 3,832 (69%) were household male members and 1,719 (31%) were household female members. There were more male members than female members accessing agricultural credits in all the districts except Kiteto, where more female members (69.2 percent of agricultural household members accessing credits in the district), than agricultural male members (30.8 %). The percentage of agricultural household members accessing credits is highest for males (87.5%), and lowest for females (12.5%) in Hanang district.

viii) Crop Extension Services

The number of Agricultural households that received crop extension was 158,502 (82% of the total crop growing households in the region) (Chart 3.66). Some districts had more access to extension services than others, with Hanang having a relatively high proportion of households (17.4%) that received crop extension messages in the district, followed by Babati (16.4%), Mbulu (14.5%), Kiteto (6.6%), and Simanjiro (4.6%).

ix) Soil Erosion and Water Harvesting Facilities

The number of agricultural households that had soil erosion and water harvesting facilities on their farms were 43,227 which represent (22 percent of the total number of agricultural households in the region). The proportion of households with soil erosion control and water harvesting facilities was highest in Babati district (34.4%) followed by Mbulu (27.7%), Hanang (12.2%), Simanjiro (11.4%) and Kiteto (6.9%).

x) Livestock and Poultry Production**▪ Cattle**

The total number of cattle in the region was 1,662,452. Cattle were the dominant livestock in the region followed by goats, sheep and pigs. The region had 7.8 percent of the total cattle population on Tanzania Mainland. The number of indigenous cattle in Manyara region was 1,648,488 (98.4 % of the total number of cattle in the region), 21,129 cattle (1.3%) were dairy breeds and 1,079 cattle (0.3%) were beef breeds

▪ Goats

The number of goat-rearing-households in Manyara region was 111,783 (56% of all agricultural households in the region) with a total of 488,367 goats giving an average of 40 flock of goats per goat-rearing-household. Simanjiro had the largest number of goats (480,831goats, 32.5% of all goats in the region), and Kiteto had the lowest at 152,099 goats, representing (10.3 percent of all the goats reared in the region).

▪ Sheep

The number of sheep rearing households was 72,762 (36.7 % of all agricultural households in Manyara region) rearing 640,319 sheep, giving an average of 9 heads of sheep per sheep rearing household.

▪ Pigs

The number of pig rearing agricultural households in Manyara region was 38,994 (19.6% of the total agricultural households in the region) rearing 96,485 pigs. This gives an average of 3 pigs per pig-rearing household.

▪ Chicken

The number of households keeping chicken in Manyara region was 132,920 raising about 1,061,716 chickens. This gives an average of 8 chickens per chicken-rearing household. In terms of total number of chicken in the country, Manyara region was ranked nineteen out of the 21 Mainland regions.

xi) Bee Keeping

In Manyara region 11,721 of livestock rearing households were involved in bee keeping. This represents 6 percent of agricultural households in the region. The leading districts in honey production was Babati which produced 278,011 litres (46.1% of the total litres produced in the region), with an average of 8,688 litres per household, and lowest honey producing district is Kiteto which produced 43,020 litres (7.1%), with an average of 2,689 litres per household).

xii) Poverty Indicators**Availability of Toilets**

It was estimated that 80 percent of all rural agricultural households used the traditional pit latrines, 7 percent used improved pit latrine and 1 percent had flush toilets. The remaining 0.1 percent of households had other unspecified types of toilets. However 31 percent of the total agriculture households in the region had no toilet facilities.

Household Assets

The radios/Cassette/Music system was an asset owned by most rural agricultural households in Manyara region with 30% of the agriculture households in the region owning the asset, followed by bicycle (29%), mobile phone (20%), pressing iron (12%), wheelbarrow (4%), vehicle (2%), television/video (1%), refrigerator (1%), and landline phone (1%).

Source of Lighting Energy

Wick lamp was the most common source of lighting energy in the region. About 69 percent of the total rural households using this source of energy, followed by hurricane lamp (22%), firewood (5%), pressure lamp (2%), mains electricity (1%), and solar (1%). The remaining sources were minor and represented less than 1 percent each

Energy for Cooking

The most prevalent source of energy for cooking was firewood, which was used by 95 percent of all rural agricultural households. The second most common source of energy for cooking was charcoal (3 percent), and crop residues (2%). The rest of energy sources accounted for less than 1 percent each. These were bottled gas, mains electricity, and livestock dung.

Roofing Materials

The most common material used for roofing of housing in Manyara region was iron sheet used by 50 percent of the rural agricultural households in the region. This was followed by grass/leaves (48%), Grass and Mud (14%), tiles and asbestos each accounting for 1 percent.

Number of Meals per Day

The majority of households in Manyara region normally had 3 meals per day (58 percent of the households in the region). This was followed by those who had 2 meals per day (40 percent) and 1 meal per day (2 percent).

Main Source of Cash Income

The main cash income for the households in Manyara region was from selling food crops (46 percent of smallholder households), followed by sales of livestock (14%), Casual earnings (12%), sale of cash crops (10%), business income (8%), and sale of livestock products (6%).

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1 BACKGROUND INFORMATION

1.1 Introduction

This part of the report presents a brief description of Manyara region by providing information on geographical location, land area, climate, administrative set up, population and socio-economic indicators. The information aims at providing the user with a general understanding of the region and its resources.

1.2 Geographical Location and Boundaries

Manyara region lies in the Northern East of Tanzania mainland. It borders Arusha region to the north, Kilimanjaro region in the north east and Tanga region in the east. Its southern border is shared with Dodoma and Singida. It is between latitudes $3^{\circ} 40' 6^{\circ} 0'$ south of the Equator and between longitudes 35° and 38° east of Greenwich.

The region is divided into five districts which are Babati, Hanang, Mbulu, Kiteto and Simanjiro. The region headquarters is located at Babati

1.3 Land Area

The region has an area of 51,406 square kilometers of which, 50,106 square kilometers of land area and 1300 square kilometers of water areas.

1.4 Climate

1.4.1 Temperature

The dry and cold spell in this zone begins in June and ends in October. Mean annual temperatures vary considerably from area to area mainly due to elevation differences.

1.4.2 Rainfall

The region can be divided regionally into two zones on the basis of rainfall regimes, bimodal rainfall pattern falling between October and December (short rains) with a dry spell in January. The long rains in the bimodal zone are experienced from February to June with the amount ranging from 500mm to 650mm in the year. A part of Simanjiro district falls within this rainfall pattern (bimodal). The district is semi arid and as such crop production in this zone is low with the exception of isolated areas influenced by altitude.

Unimodal rains are experienced in the rest of the region`s districts namely Babati, Hanang, Mbulu and Kiteto. In these districts there is one well defined rainy season which starts in November and ends in May. Rain in this zone range from 800mm to 1000mm and are adequate to support rainfed agriculture.

1.5 Population

According to population projections based on the 2002 Population and Housing Census, the population of Manyara region in 2007 was estimated at 1,239,000 inhabitants. The population of Manyara region ranked 16th with the largest population out of the 21 regions of Tanzania Mainland.

1.6 Socio-Economic Indicators

The regional Gross Domestic Product (GDP) at current prices for the year 2008 was estimated to be Tsh. (1,288,280) million with per capita income of 862,074 Tshs (3.48 percent of the total regional GDP).

Given that wildlife resources are the essence of tourism development, then Manyara despite its underdeveloped road system has very good potential. Already, Tarangire National Park is known in many tourist centers throughout the world. There are five NAFCO large scale farms which are up for privatization. The farms are ideal for the production of wheat, seed beans and livestock products.

2 INTRODUCTION

This section provides technical and operational description of the National Sample Census of Agriculture (NSCA), carried out in the rural areas of Tanzania Mainland and Tanzania Zanzibar during the 2007/08 agricultural year. It details the background and the rationale for carrying out the NSCA in 2007/08 agricultural year. It also explains the sampling procedures, designing and implementation of the data processing system.

This report (Volume Vu) is among the 21 regional reports for the Mainland. Other Census reports include the Technical Report (Volume I), Crop Sector Report at National level (Volume II), Livestock Report at National level (Volume III), Large Scale Farms Report (Volume IV), Regional Reports (Volume V series), Zanzibar Livestock Report (Volume VI) and Zanzibar Crop Sector Report (Volume VII). Unlike the 2002/03 Agricultural Sample Census, the 2007/08 Sample Census does not have a separate report for Smallholder Household Characteristics and Access to Natural Resources Report. Other thematic reports will be produced depending on the demand and availability of funds.

This report is divided into five main sections; Background Information, Introduction, Census Results, District Profiles and Appendices. The definitions relating to all aspects of this report can be found in the questionnaire.

2.1 The Rationale for Conducting the National Sample Census of Agriculture

The Government of Tanzania has embarked on various plans geared to eradicate poverty by the year 2025 and Tanzania Zanzibar by the year 2020. In order to facilitate intervention and monitoring activities of the Poverty Monitoring Master Plan, the government has planned a series of censuses and surveys to assist in policy formulation, planning and to track changes in the wellbeing of the population of Tanzania. In this Master Plan, a series of Agricultural Censuses have been planned, the first one was undertaken in 2002/03 agricultural year and the second in 2007/08.

Demands for reliable and timely agricultural data have become significantly increasing for monitoring outcomes and progress of the poverty monitoring tools like the Agricultural Sector Development Programme (ASDP) and performance of the respective MDAs (ASLMs).

Following the decentralization of the Government's administration and planning functions, there has been a pressing need for agricultural and rural development data disaggregated at regional and district level. The provision of district level estimates will provide essential baseline information on the state of agriculture that supports decision making by the Local Government Authorities and in the design of District Agricultural Development and Investment Projects (DADIPS). The increase in investment is an essential element in the national strategy for growth and reduction of poverty.

2.2 Census Objectives

The 2007/08 Agricultural Sample Census was designed to meet the data needs of a wide range of users down to the district level including policy makers at local, regional and national levels, rural development agencies, funding institutions, researchers, NGOs, farmers organizations, and the like. The dataset is both extensive in its sample and detailed in its scope and coverage to meet the user demand.

The census was carried out in order to:

- Identify structural changes, in the size of farm household holdings, crop and livestock production, farm inputs and implement use. It also seeks to determine if there are any improvements in the rural infrastructures and the level of agricultural household living conditions.
- Provide benchmark data on productivity, production and agricultural practices in relation to policies and interventions promoted by the Ministry of Agriculture and Food Security and other stakeholders.
- Establish baseline data for the measurement of the impact of high level objectives of the Agricultural Sector Development Programme (ASDP), National Strategy for Growth and Reduction of Poverty and other rural development programmes and projects.

2.3 Census Scope and Coverage.

The 2007/08 Agricultural Sample Census was conducted for both large and small scale farms. The data was collected from a sample of 52,635 small scale agricultural households of which 48,880 were from the Mainland and 4,755 from Zanzibar. To meet National estimates, data was also

collected from 1,006 Large Scale Farms (968 on the Mainland and 38 in Zanzibar) on a complete enumeration basis.

Three different questionnaires were used to collect data on agriculture and related aspects. These were:

- Small scale farms questionnaire;
- Community questionnaire; and
- Large scale farm questionnaire.

The small scale farm questionnaire was the main census instrument which included questions related to crop and livestock production and practices; population demographics; access to services; resources and infrastructure; issues on poverty and gender. Main subjects covered during the study include:-

- Household demographics and activities of the household members;
- Land access/ownership/tenure and use;
- Crop and livestock production and productivity;
- Access to inputs and farming implements;
- Access and use of credits;
- Crop marketing, storage;
- Fish farming;
- Investment activities: Irrigation structures, water harvesting, erosion control;
- Off farm income;
- Livelihood constraints; and
- Poverty Indicators.

The community level questionnaire was designed to collect village data such as access and use of common resources, community tree plantation and seasonal farm gate prices.

Large Scale Farm questionnaire was administered to all the large scale farms either privately or corporately managed. However, the analysis of Large Scale Farms is presented in a separate report (Volume IV).

2.4 Census Methodology

The main focus at all stages of the census execution was on data quality and this has been emphasized all the time. The main activities undertaken include:

- Census organization;
- Tabulation plan preparation;
- Sample design;
- Design of census questionnaire and other instruments;
- Pilot test;
- Training of trainers, supervisors and enumerators;
- Information Education and Communication (IEC) campaign;
- Data collection;
- Field supervision and consistency checks;
- Data processing:
 - Scanning,
 - Structure formatting application,
 - Batch validation application,
 - Manual data entry application,
 - Tabulation preparation using SPSS;
- Table formatting and charts using Excel, maps generation using Arc GIS and Excel, Report preparation using Ms Word and Excel.

2.4.1 Census Organization

The census was conducted by the National Bureau of Statistics (NBS) in collaboration with Ministries of Agriculture, Food Security and Cooperatives, Livestock and Fisheries Development; Water; Industry and Trade; and the Prime Minister's Office, Regional Administration and Local Government in Tanzania Mainland. The Office of the Chief Government Statistician, (OCGS), Ministries of Agriculture and Natural Resources, Livestock and Fisheries in Tanzania Zanzibar.

At the national level, the Census was headed by the Director General of the National Bureau of Statistics, Tanzania Mainland in collaboration with the Chief Government Statistician, Tanzania Zanzibar. The planning Group formed by the Director General of NBS and the Chief Government Statistician consisted of staff from the Department of Agriculture Statistics of NBS, Department of

Economic Statistics of OCGS, Department of Policy and Planning of the Ministry of Agriculture, Food Security and Cooperatives, Department of Policy and Planning of the Ministry of Livestock and Fisheries Development in the Mainland. Ministry of Livestock and Fisheries and the Ministry of Agriculture and Natural Resources in Zanzibar.

The Planning Group was responsible for all the census operations. Implementation of the census activities at the regional level was overseen by the Regional Statistical Managers of NBS and the Regional Agricultural Supervisors from the Prime Minister's Office, Regional Administration and Local Government. At the district level, the census activities were managed by two supervisors from the Prime Minister's Office, Regional Administration and Local Government (PMO-RALG). The supervisors managed the enumerators who also came from PMO-RALG. As for Zanzibar, implementation of the census activities at the regional level was overseen by the Regional Statistical Officers and Regional Agricultural Officers. At District level, implementation of the census activities was managed by District Agricultural Development Officers (DADOs). In addition, there was a national mobile team to supervise the census operations.

The Censuses and Surveys Technical Working Group (CSTWG) under MKUKUTA provided support in sourcing financing, approving budget allocation and monitoring progress of the census. A Technical committee for the census was established with members from key stakeholder organizations and its main function was to approve the proposed instruments and procedures developed by the Planning Group. It also approved the tabulation and analytical reports prepared from the census data.

2.4.2 Tabulation Plan Preparation

The tabulation plan was developed considering the tabulations from previous censuses and surveys to allow trend analysis and comparisons as well as the needs of end users.

2.4.3 Sample Design

The Mainland sample consisted of 3,192 villages. These villages were drawn from the National Master Sample (NMS) developed by the National Bureau of Statistics (NBS) to serve as national framework for the conduct of household based surveys in the country. The National Master Sample was developed from the 2002 Population and Housing Census. The total Mainland sample was

47,880 agricultural households. In Zanzibar, a total of 317 Enumeration Areas (EAs) were selected and 4,755 agricultural households were covered. National wide, all regions and districts were sampled except four urban districts (three from Mainland and one from Zanzibar).

In both Mainland and Zanzibar, a two stage sampl was used. The number of villages/Enumeration Areas (EAs) was selected for the first stage with a probability proportional to the number of villages/EAs in each district. In the second stage, 15 households were selected from a list of households in each village/EA using systematic random sampling. Table 1.1 gives the sample size of households, villages and districts for the Mainland and Zanzibar.

Table 2.1: Census Sample

Description	Mainland	Zanzibar	Total
Households	47,880	4,755	52,635
Villages/EAs	3,192	317	3,509
Districts	133	9	142
Regions	21	5	26

2.4.4 Questionnaire Design and Other Census Instruments

The questionnaire was designed following users meetings to ensure that the questions asked were in line with the users data needs. Several features were incorporated into the design of the questionnaire to increase the accuracy of the data as follows:

- Where feasible, all variables were extensively coded to reduce post enumeration coding errors;
- The definitions for each section were printed on the opposite page so that the enumerator could easily refer to the instructions whilst interviewing the respondent;
- The responses to all the questions were placed in boxes printed on the questionnaire, with one box per character. This feature made it possible to use scanning and Intelligent Character Recognition (ICR) technologies for data capture;

-
- Skip patterns were used to reduce unnecessary and incorrect coding of sections which do not apply to the respondent; and
 - Each section was clearly numbered, which facilitated the use of skip patterns and provide a reference for data type coding for the programming of CSPro and SPSS.

Three other instruments were used:

- Village Listing Forms were used for the listing of households in the village/EA and from this list, a systematic sample of 15 agricultural households were selected;
- A training manual which was used by the trainer for the cascade/pyramid training of supervisors and enumerators; and
- Enumerator's Instructions Manual was used as reference material.

2.4.5 Field Pilot-Testing of the Census Instruments

The questionnaire was pilot-tested in four locations (Arusha, Dodoma, Unguja and Pemba). This was done to check the wording, flow and relevance of the questions and to finalize crop lists, questionnaire coding and manuals. In addition, several data collection methodologies had to be finalized, namely; livestock numbers in pastoral communities, mixed cropping, use of percentages in the questionnaire and finalizing skip patterns and documenting consistency checks.

2.4.6 Training of Trainers, Supervisors and Enumerators

During the training, a cascade/pyramid training techniques were employed to maintain statistical standards. The top level of training was provided to 78 national and regional supervisors (65 from Mainland and 13 from Zanzibar). The trainers were members of the Planning Group from the National Bureau of Statistics, the sector Ministries of Agriculture and Office of the Chief Government Statistician, Zanzibar. In each region, three training sessions were conducted for the district supervisors and enumerators. The training concentrated on questionnaires, listing forms, field level census methodology and definitions. Emphasis was placed on consistency checking in the field. Tests were given to the enumerators and supervisors and the best 50 percent of the trainees were selected for the actual field work. The remaining 50% were assigned the work of

listing the households in the villages they belong and they were later terminated. The best trained enumerators were assigned to list the remaining villages. Each enumerator was assigned to enumerate two villages.

2.4.7 Information, Education and Communication (IEC) Campaign

Radios, televisions, newspapers, leaflets, t-shirts and caps were used to create awareness of the Agricultural Sample Census to the public. This strategy helped in sensitizing the public for the field level activities in order to increase the response rate. The t-shirts and caps were given to the field staff and the village chairpersons. The village chairpersons assisted to locate the selected households.

2.4.8 Data Collection

Data collection activities for the 2007/08 Agricultural Sample Census lasted for three months from June to August 2009. The direct interview method was used to collect data during the enumeration. Data collection was monitored by a hierarchical system of supervisors which included the Mobile Response Team, Regional and District Supervisors. The Mobile Response Team headed by the Manager of Agriculture Statistics Department, provided the overall direction to the field operations and responded to queries arising outside the scope of the training exercise. Decisions made on the definitions and procedures were then communicated back to all the enumerators via the Regional and District Supervisors. On the Mainland, each region had 2 Regional Supervisors (total of 42) and 2 district supervisors per district, (Total 266).

District supervision and enumeration were performed by staff from the Prime Minister's Office, Regional Administration and Local Government (PMO-RALG) and the sector Ministry of Agriculture. Regional and national supervision was provided by senior staff from the NBS and sector Ministries of Agriculture. In Zanzibar, the enumeration was conducted by staff from the Ministry of Agriculture and Natural Resources and Ministry of Livestock and Fisheries. Supervision was provided by senior officers of the same Ministries and the Office of the Chief Government Statistician.

During the household listing exercise, some 3,192 extension staff participated on the Mainland. A total of 177 enumerators participated during the listing exercise and enumeration using the small holder questionnaire in Zanzibar. A total of 1,596 enumerators were involved in data collection

using the small holder questionnaire on the Mainland. Additional five percent of the enumerators were held as reserves in case of drop outs during the enumeration exercise.

2.4.9 Field Supervision and Consistency Checks

Enumerators were trained to probe the respondents until they were satisfied with the responses before they recorded them in the questionnaire. The first check on the questionnaire was carried out by the enumerators in the field during enumeration, followed by District, Regional and National supervisors. Supervisory visits at all levels of supervision focused on checking the completeness of the questionnaires and consistency. Inconsistencies encountered were corrected, and where necessary, a call back to the respondent was made by the enumerator to obtain the correct information. Further quality control checks were made by the district supervisors.

2.4.10 Data Processing

- Data processing involved the following process:
- Data entry;
- Data structure formatting;
- Batch validation; and
- Tabulation.

Data Entry

Scanning and ICR data capture technology was used. This did not only increase the speed of data entry but also increased the accuracy due to reduction of keystroke errors. Interactive validation routines were incorporated into the ICR software to trap errors during the verification process.

Prior to scanning, all the questionnaires underwent a manual cleaning exercise by checking that the questionnaire had a full set of pages, correct identification and good hand-writing. A score was given to each questionnaire based on the legibility and the completeness of enumeration. This score was used to assess the quality of enumeration and supervision.

CSPPro computer program was used for data entry of the questionnaires that were rejected by the ICR extraction application.

Batch Validation

A batch validation program was developed in CSPPro in order to identify inconsistencies within a questionnaire. This was in addition to the interactive validation during the ICR extraction process.

The procedures varied from simple range checking within each variable to more complex checking between variables. After data cleaning, the tables were prepared based on a pre-designed tabulation plan.

Tabulation

Statistical Package for Social Sciences (SPSS) was used to produce the census tables and Microsoft Excel was used to organize the tables and compute the additional indicators. Excel was also used to produce charts while Arc GIS was used for generating the maps.

Report Writing

The report writing focused on the regional comparisons, time series and national estimates. Microsoft Excel was used to produce charts; Arc GIS and Excel were used to generate maps, whereas Microsoft Word was used in compiling and report writing.

Data Quality Control

A great deal of emphasis was placed on data quality throughout the whole exercise, from planning; questionnaire design, training, supervision, data entry, validation and cleaning/editing. As a result of this, it is believed that the census is highly accurate and representative of what was experienced at the field level during the census year. With very few exceptions, the variables in the questionnaire are within the norms for Tanzania and they follow the expected time series trends when compared to historical data.

2.5 Funding Arrangements

The 2007/08 Agricultural Sample Census was supported mainly by the Department for International Development (DFID) and the Japan International Cooperation Agency (JICA) which together, financed most of the operational activities. Other funds for the census activities were from the Government of Tanzania. In addition, technical assistance was provided by the Food and Agriculture Organisation (FAO).

3 CENSUS RESULTS

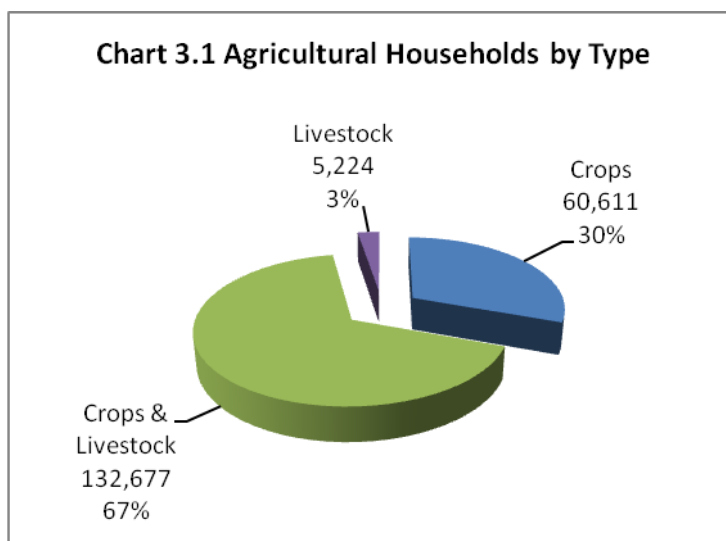
This part of the report presents the census results for Manyara region, based on the statistical data tables presented in Appendix II. The results are presented in various forms including brief summaries, charts, condensed tables, graphs and maps to facilitate understanding of information among the users.

Comparisons are made between related variables and between districts. Comparisons are also made between the current and the 2003 surveys results. The results are divided into four main sections which include household characteristics, crop results, livestock results and poverty indicators. In comparison, as for the 2003 censuses, in the current survey more effort has been expended in analyzing the results in order to formulate solid conclusions.

3.1 Household Characteristics

3.1.1 Type of Household

The number of agricultural households in Manyara region was 198,513. Most households in the region 132,677 (67%) were involved in crops as well as livestock production, 60,611 (30%) were involved in growing crops only, and 5,224 (3%) were involved in rearing livestock only. Pastoralist was not reported in Manyara region. The largest number of agricultural households was



in Babati (63,816hh, 32%) followed by Mbulu (41,889hh, 21%), Hanang (39,494hh, 20%), Kiteto (30,196hh, 15%), and Simanjiro (23,117hh, 12%), and (Map 3.01). The highest density of households was found in Babati (478hh/km²) (Map 3.02) (Chart 3.1) (Map 3.03, 3.04, 3.05 and 3.06).

3.1.2 Livelihood Activities/Source of Income

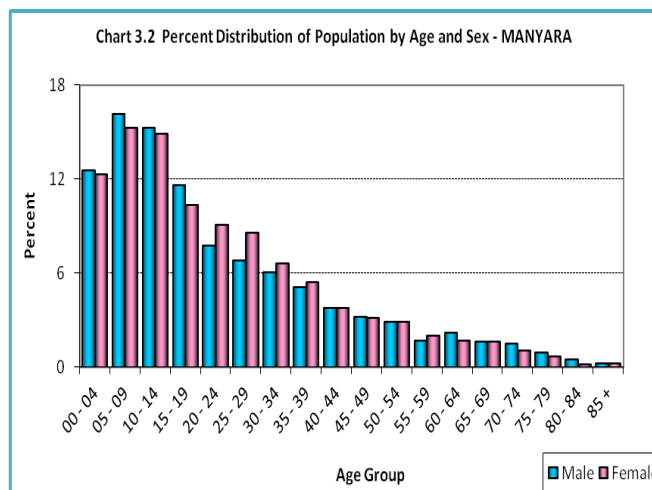
The census results for livelihood activities/source of income were recorded for on farm activities and for Manyara region most of the agricultural households (46%) ranked annual crop/seaweed farming as an activity that provided most of their cash income, followed by livestock keeping/herding (4.5%). Livestock/pastoralist and fishing activities were insignificant accounting for 0.2 percent of the total surveyed sources of income. Fish farming was not reported in Manyara (Table 3.1).

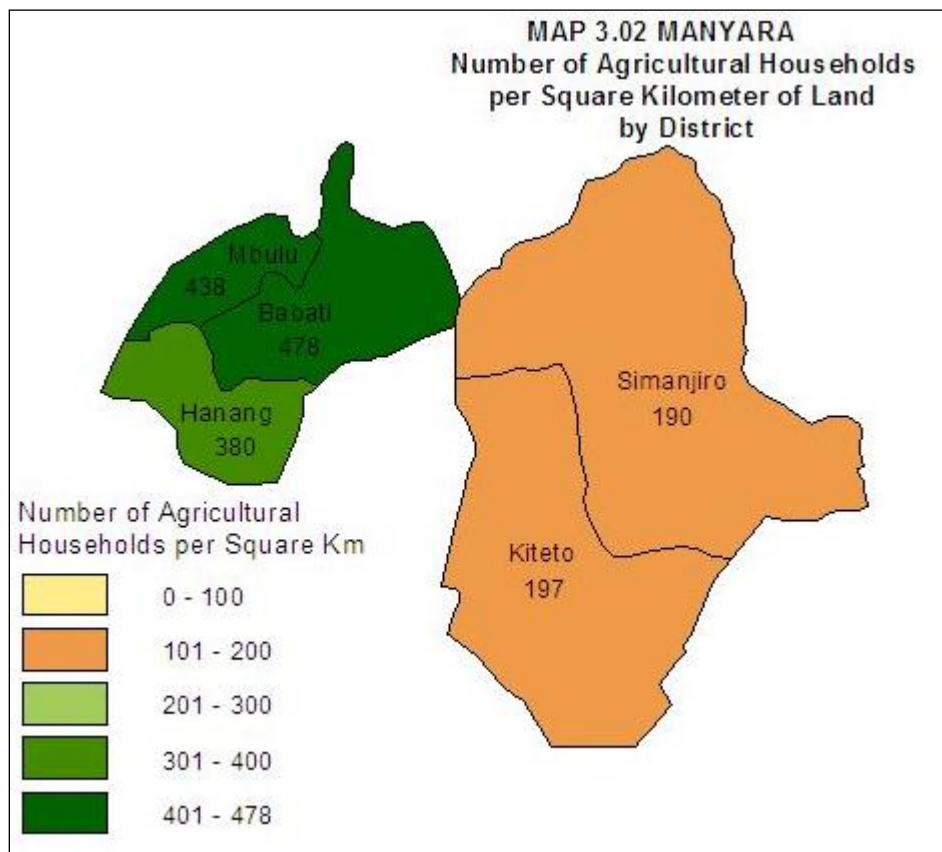
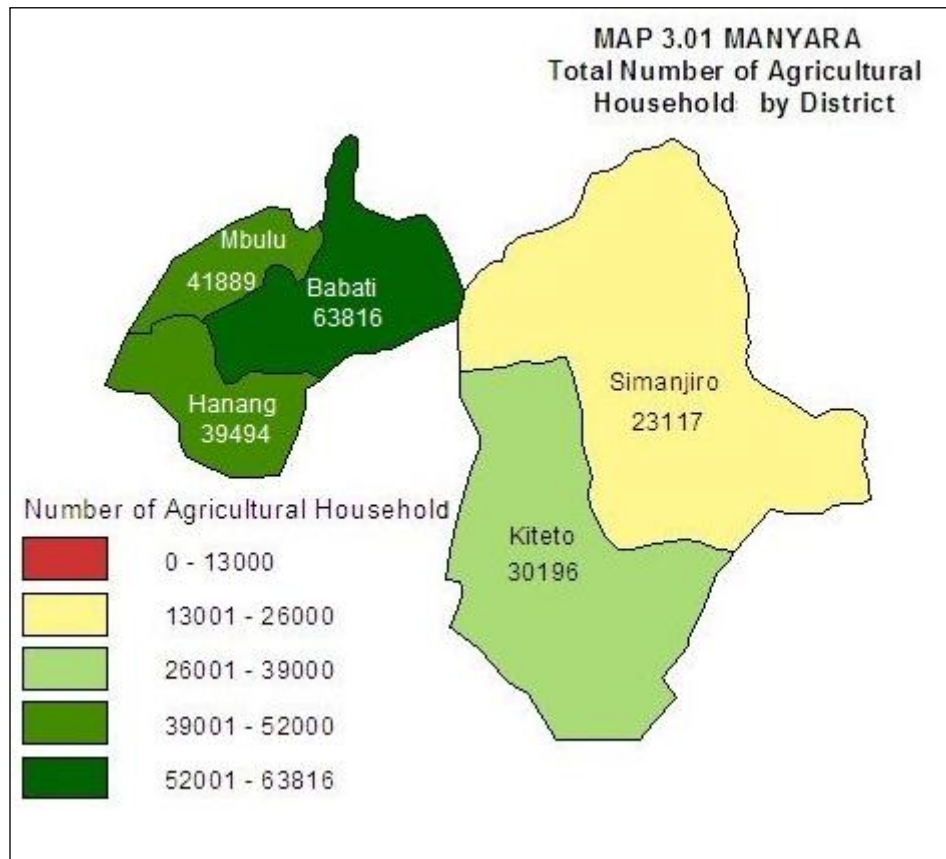
Table 3.1: Number and Percentage of Agricultural Household by Main Activity and District

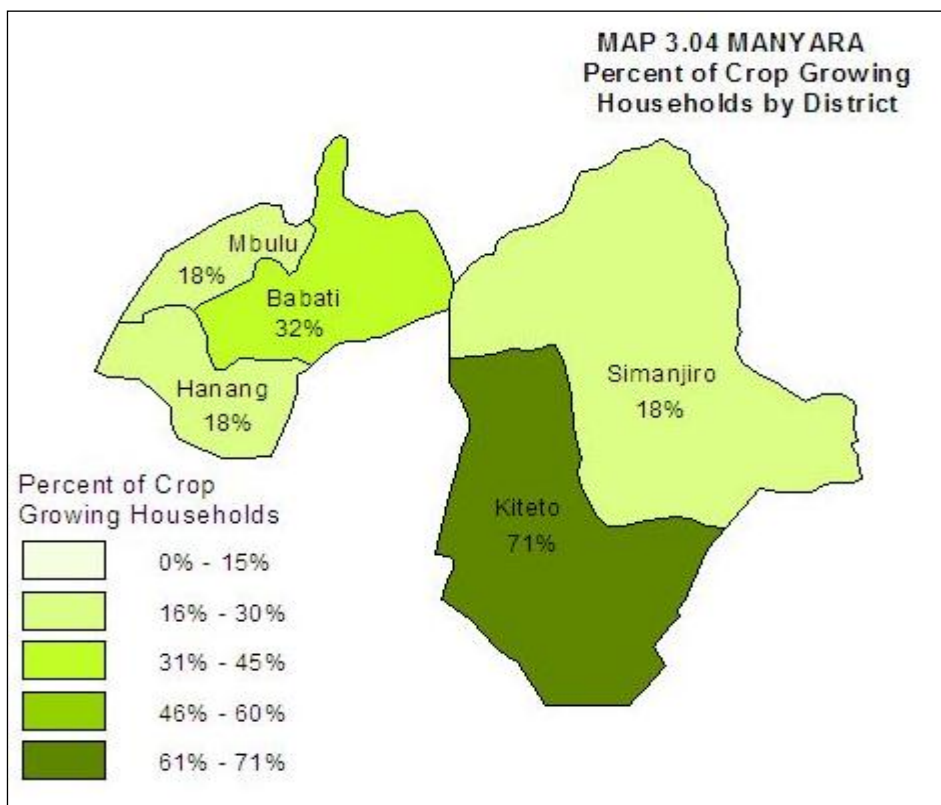
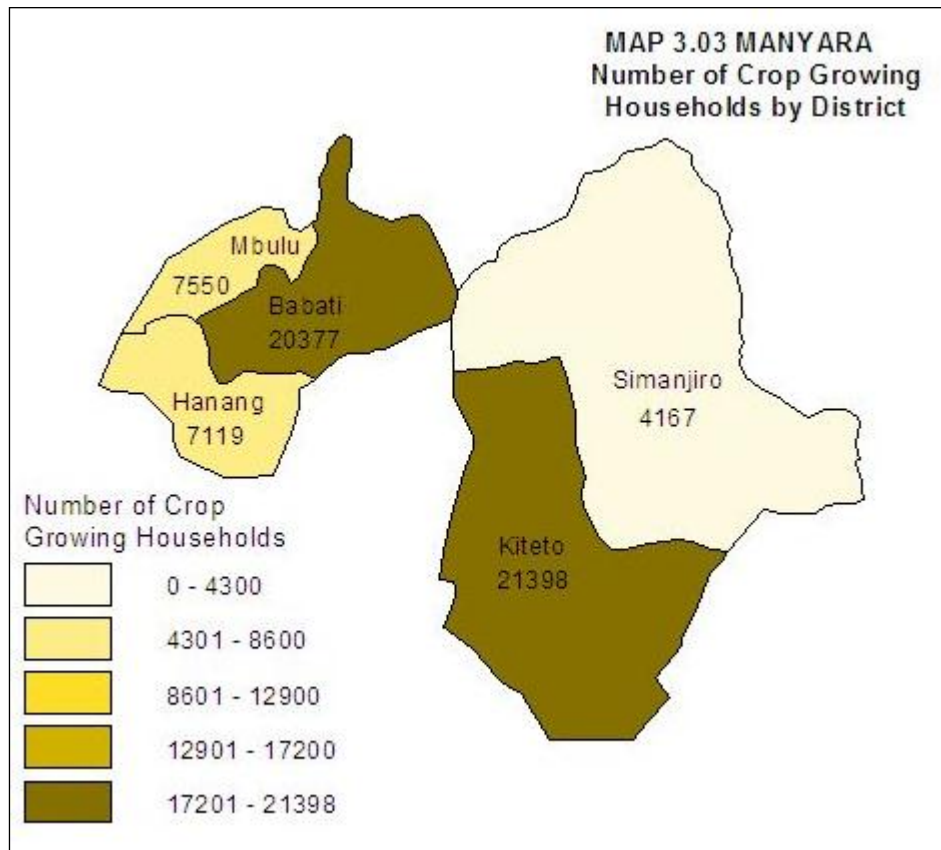
District	Main Activity									
	Crop/Seaweed Farming		Livestock Keeping / Herding		Livestock Pastoralist		Fishing		Fish Farming	
	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	74,132	53.0	8,866	0.6	142	0.0	789	0.1	0	0.0
Hanang	22,397	35.1	112,919	12.3	4,775	0.5	905	0.1	0	0.0
Mbulu	32,159	41.2	12,283	1.2	388	0.0	1,211	0.1	0	0.0
Simanjiro	51,351	46.4	22,915	1.6	798	0.1	6,219	0.4	0	0.0
Kiteto	85,388	54.4	12,730	1.0	4,290	0.3	2,290	0.2	0	0.0
Total	265,427	45.8	44,866	4.5	1,613	0.2	2,052	0.2	0	0.0

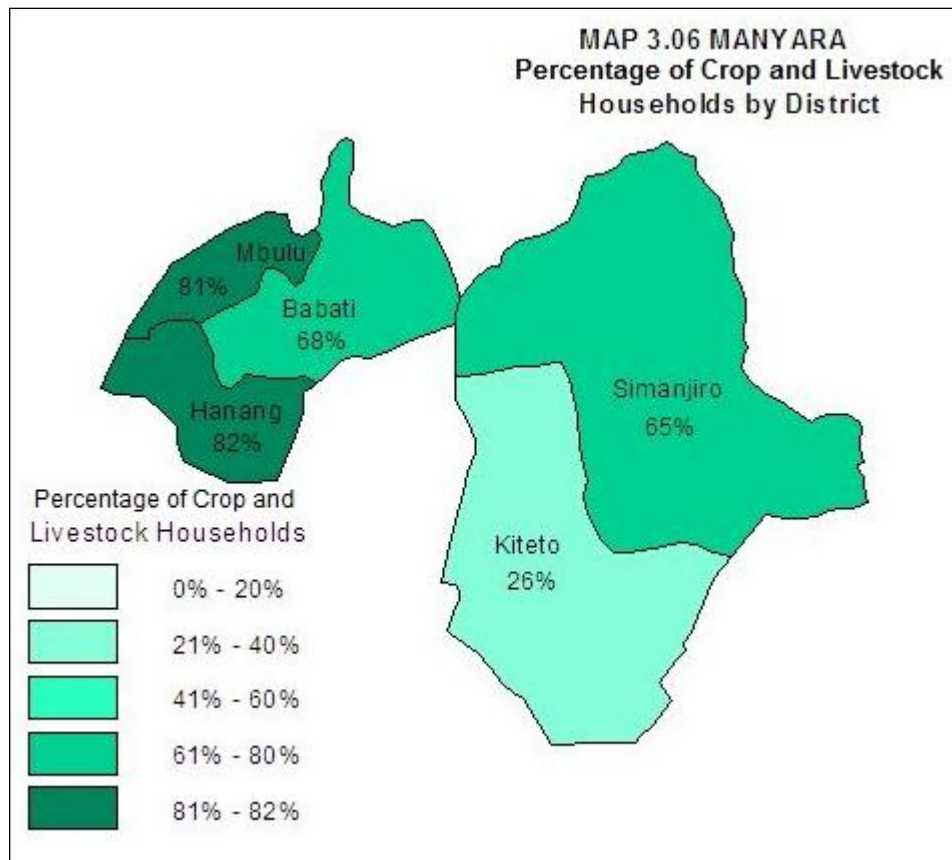
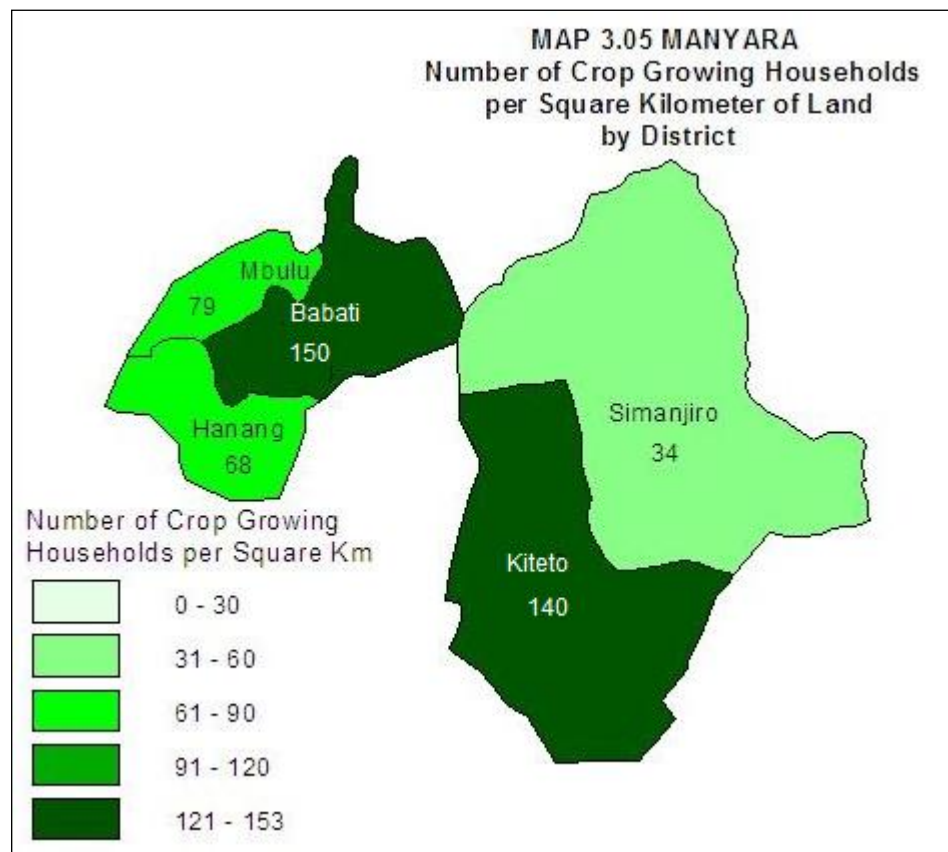
3.1.3 Sex and Age of Household members

The number of male agricultural household members in Manyara region was 603,853 (52% of the total regional agricultural households) whilst that of female household members it was 554,980 (48% of the total regional agricultural households). The mean age of household heads was 45 years for male heads and 48 years for female heads)









3.1.4 Number and Age of Household Members

Manyara region had a total rural agricultural population of 1,158,833 of which 603,853 (52%) were males and 554,980 (48%) were females. The age group 10-14 constituted 54 percent of the total rural agricultural population, age group 15–64 (active population) was only 53 percent (Chart 3.2).

3.1.5 Level of Education

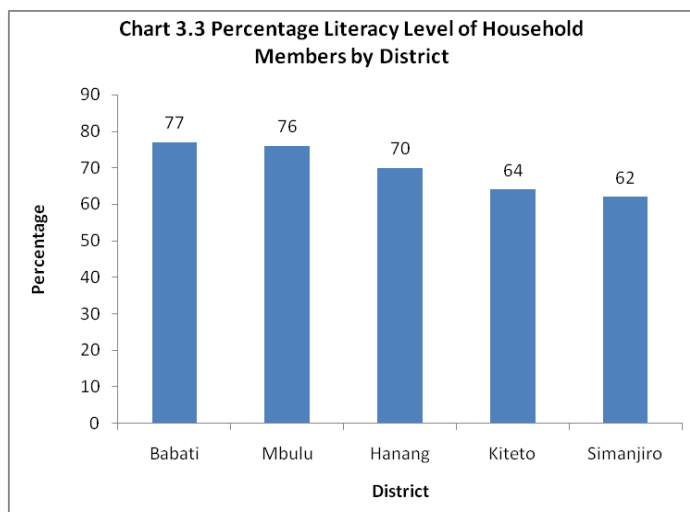
In order to obtain information on the level of education, information on literacy and education attainment were obtained for all persons aged five years and above in all households.

Literacy

The information on literacy level for family members aged five years and above was obtained by asking individual private households if their respective family members could read and write in Kiswahili only, English only, both English and Swahili or in any other language. Literacy is based on the ability to read and write Swahili, English or both.

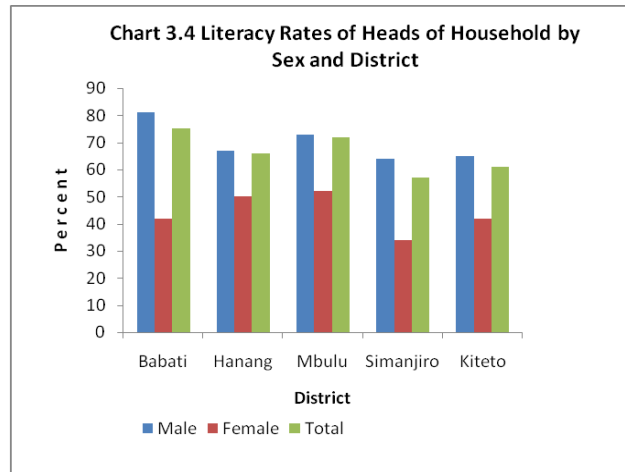
Literacy Level of Household Members

The results show that Manyara region had a total literacy rate of 72 percent. The highest literacy rate was found in Babati (77% percent of the total population). This was followed closely by Mbulu (76%), Hanang (70%), and Kiteto (64%). However, Simanjiro district had the lowest literacy rate (62%), (Chart 3.3).



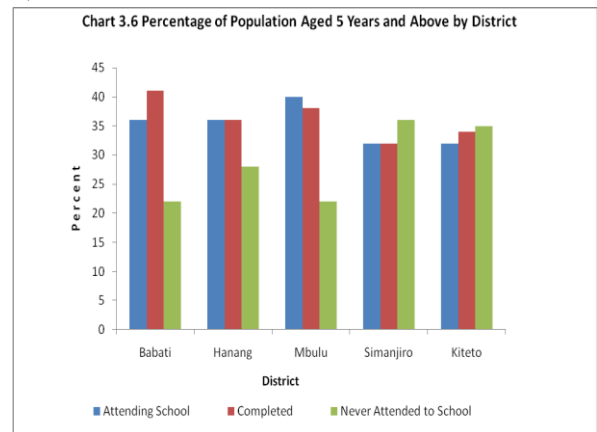
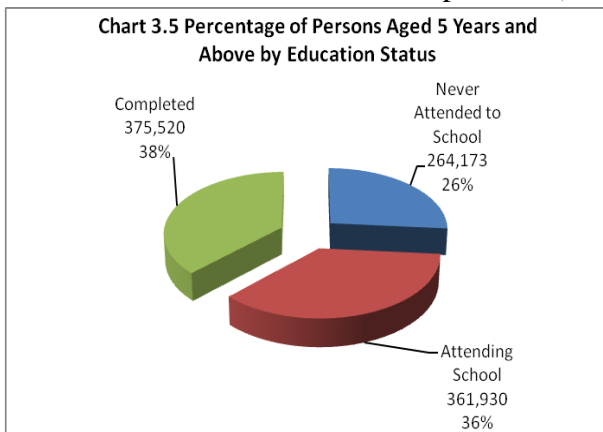
Literacy Rates for Heads of Households

The literacy rate for the heads of households in the region was 68 percent. The literacy rates among the male and female heads of households were 72 and 42 percents respectively. The literacy rate for male heads of households was higher than that of female heads in all the districts. The district with the highest literacy rate amongst male heads of household was Babati (81%), followed by Mbulu (73%). Literacy rates among male heads was lowest in Simanjiro (64%), followed by Kiteto (65%). However, Mbulu and Hanang districts had the second highest literacy rates among female heads at (52% and 50%) respectively, (Chart 3.4).



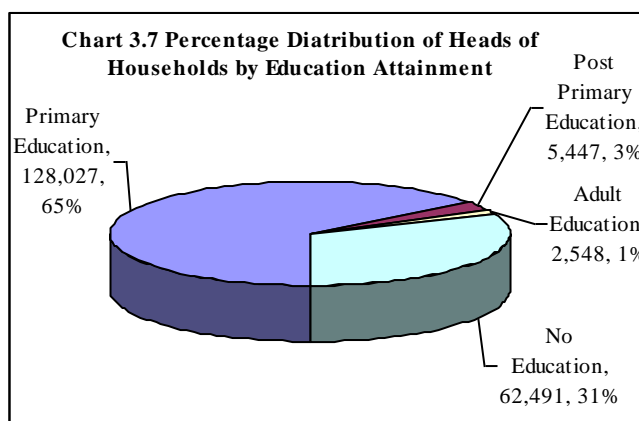
Educational Status

Information on educational status was collected from individual agricultural households. The results show that, 37 percent of the population aged 5 years and above in agricultural households had completed different levels of education and 36 percent were still attending school. Those who have never attended school were 26 percent, (Chart 3.5).



Agricultural households in Babati district had the highest percentage of population aged 5 years and above who had completed different levels of education (41%). This was followed by Mbulu district with (38%), Hanang (36%), Kiteto (34%) and Simanjiro (32%). Simanjiro district had the highest percent of households that have never attended school (36%) followed by Kiteto (35%) (Chart 3.6).

The number of heads of agricultural households with formal education in Manyara region was 133,474 (67.2%), those without any education were 62,491 (31.5%) and those with only adult education were 2,548 (1.3%). The majority of heads of agricultural households in Manyara region had primary level education (65%), whereas only 3 percent had post primary education (Chart 3.7).



With regard to the heads of agricultural households with primary level education in Manyara region, Babati had the highest percentage (71%) of heads of household with primary education, followed by Mbulu (69%), Hanang (62%), Kiteto (57%) and Simanjiro 52 percent. Simanjiro district had the lowest percentage (52%) of heads of household with primary level education and the highest percentage (3%) of the heads of agricultural households with post primary level of education as well as those with no education (44%). (Table 3.2).

Table 3.2: Number and Percentage of Heads of Agricultural Households By Education Attainment and District , 2007/08 Agricultural Year

District	Primary Education		Post Primary Education		Adult Education		No Education		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	45,335	71	2,053	3	632	1	15,796	25	63,816	100
Hanang	24,672	62	975	2	488	1	13,360	34	39,494	100
Mbulu	28,754	69	931	2	827	2	11,377	27	41,889	100
Simanjiro	12,044	52	742	3	228	1	10,103	44	23,117	100
Kiteto	17,223	57	746	2	373	1	11,855	39	30,196	100
Total	128,027	64	5,447	3	2,548	1	62,491	31	198,513	100

3.2 Land Use

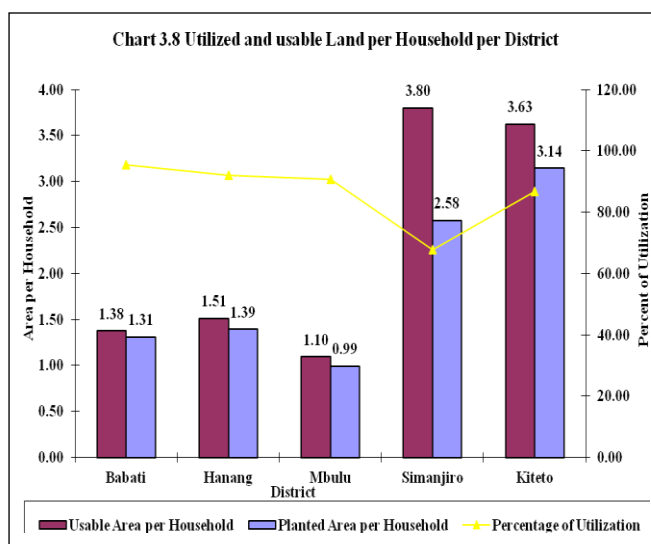
Land area and planted area are two different types of area measurements. Land area refers to the physical area of land and is the same regardless of the number of crops planted on the land in one year. Planted area is the total area of crops planted in a year and the area is summed if there were more than one crop on the same land per year. A number of terms are used in this section which requires defining for clarification as follows: Land available refers to the area of land that has been allocated to smallholders through customary law, official title or other forms of ownership.

Land available does NOT mean the total area of land that is designated as agriculture land in the Country; but it is the land that is available to smallholders given the location of villages and lack of access to more remote parcels of unused agriculture designated land. Usable land refers to the available land minus the land that cannot be used e.g., bare rocks, shallow soils, steep slopes, swamp areas, etc. It does however include un-cleared bush. Utilised land refers to the land that was used during the year.

3.2.1 Area of Land Utilised

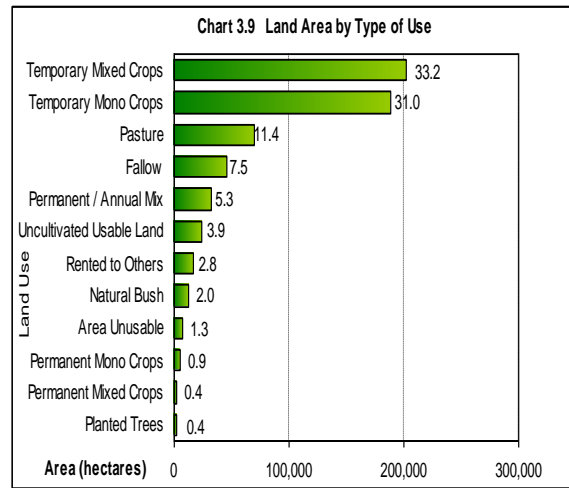
The total area of land available to smallholders was 608,088 hectares. The regional average land area utilized for agriculture per household was only 3.1 hectares. This is more than the national average which was estimated at 2.0 hectares.

About 86.4 percent of the total land available to smallholders was utilized and only 13.6 percent of the usable land available to smallholders was not used. There are slight differences in land area utilized per household across districts with Kiteto and Simanjiro each utilizing an estimated 4 hectares per household, followed by Hanang (1.5 ha/hh), Babati (1.3 ha/hh) and Mbulu (1.1 ha/hh). The utilization percentage of the usable land per household was highest in Babati (95%) and lowest in Simanjiro (66%), (Chart 3.8 and Map 3.07).



3.2.2 Types of Land Use

The area of land under temporary mixed crops was 202,029 hectares (33.2% of the total land available to smallholders), followed by temporary mono crops (188,587 ha, 31%), pasture (69,344ha 11.4%), area under fallow (45,487ha,7.5%), area under permanent/annual mix (32,223 ha, 5.3%), uncultivated usable land (23,961ha, 3.9%), area rented to others (17,001 ha, 2.8%), area under natural bush (12,053 ha, 2.0%), area unusable (7,689 ha, 1.3%), area planted with permanent mono crops (5,396 ha, 0.9%), area under permanent mixed crops (2,178 ha, 0.4%), and area under planted trees (2,140 ha, 0.4%), (Chart 3.9).

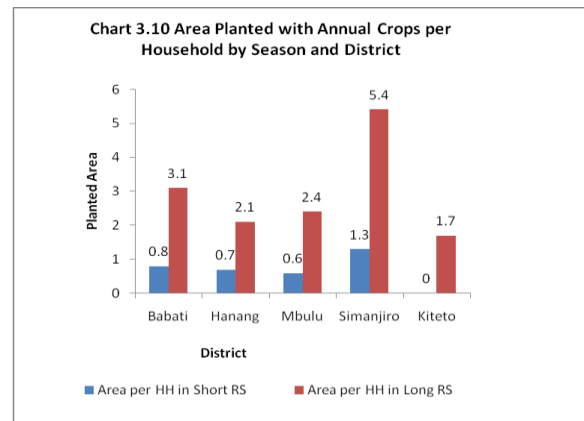


3.3 Annual Crop and Vegetable Production

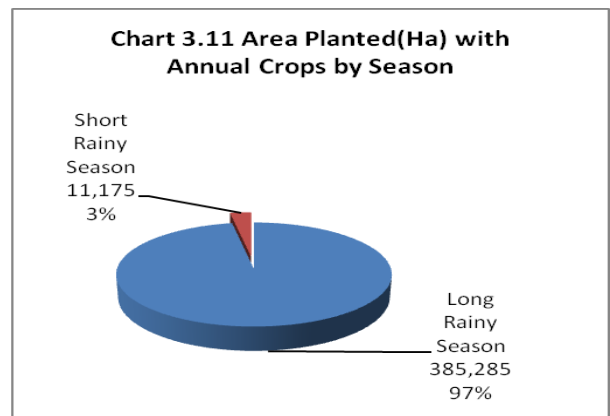
Normally, Manyara region has two rainy seasons, namely; the short rainy season (October to November) and the long rainy season (April to May).

3.3.1 Area Planted

The area planted with annual crops and vegetables was 396,459 hectares out of which 11,175 hectares (3%) were planted during short rainy season and 385,285 hectares (97%) during long rainy season (Chart 3.11).



The average areas planted per household during the short and long rainy seasons was 0.8 and 1.6 ha respectively. The district with the largest planted area per household was Simanjiro (3.9 ha/hh), followed by Babati (3.9 ha/hh), Mbulu (3 ha/hh), and Hanang (2.8 ha/hh). Kiteto had the smallest planted area per household (1.7ha/hh) followed by Hanang with 2.1 hectares per household. Simanjiro district had the highest percentage of planted area in the short rainy season, (Chart 3.10 and Map 3.08).



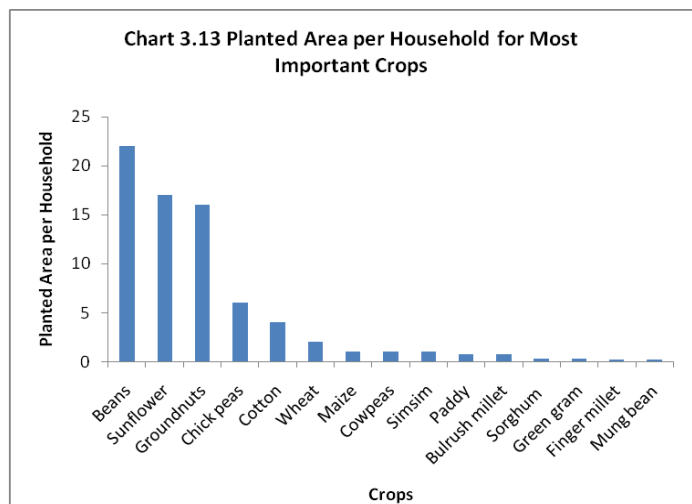
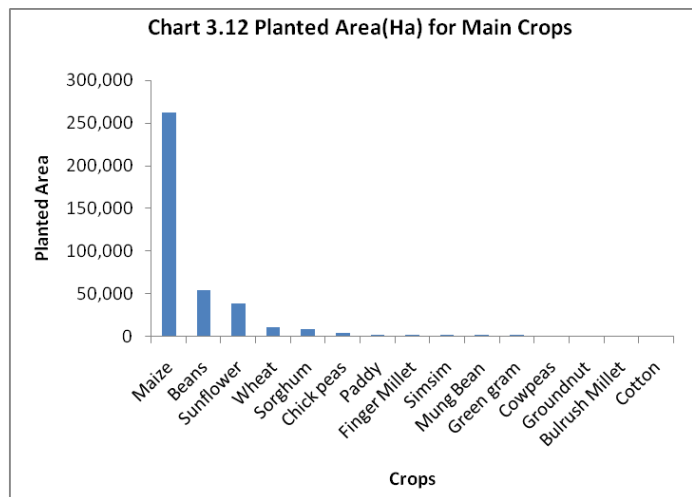
The average planted area per household during the long rainy season in Manyara region was 1.6 hectares, however, there were large district differences. Simanjiro had the largest planted area per household during the long rainy season (5.4 ha/hh), followed by Babati (3.1 ha/hh), and Mbulu and Hanang each with an estimated 2 hectares per household. The smallest planted area per household in the long rainy season was in Kiteto district at 1.7 hectares per household. The planted area per household in the short rainy season was smaller than the planted during the long rainy season which accounted for less than one hectare in all the districts. Kiteto district recorded almost zero planted area per household during short rainy season (Chart 3.10 and Map 3.09).

Analysis of the Most Important Crops

Results on crop production have been presented in two different sections. The first section compares the importance of each crop regardless of whether they are annual or permanent. The second section contains a more detailed analysis on production based on crop types.

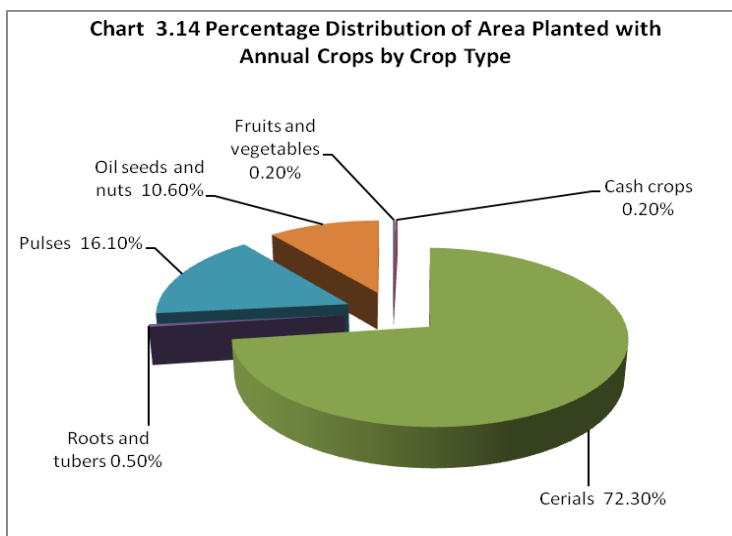
3.3.2 Crop Importance

Maize is the dominant annual crop grown in Manyara region and it had a planted area of 5 times greater than beans, which had the second largest planted area. The area planted with maize constitutes 66.8 percent of the total area planted with annual crops in the region. Other crops in order of their importance (based on area planted) are sunflower, wheat, sorghum, chick peas, paddy, finger millets, simsim, mung bean, green gram, cow peas, ground nuts, bulrush millet, and cotton (Chart 3.12). Households that grow beans, sunflower and groundnuts have larger planted areas per household than for other crops (Chart 3.13).

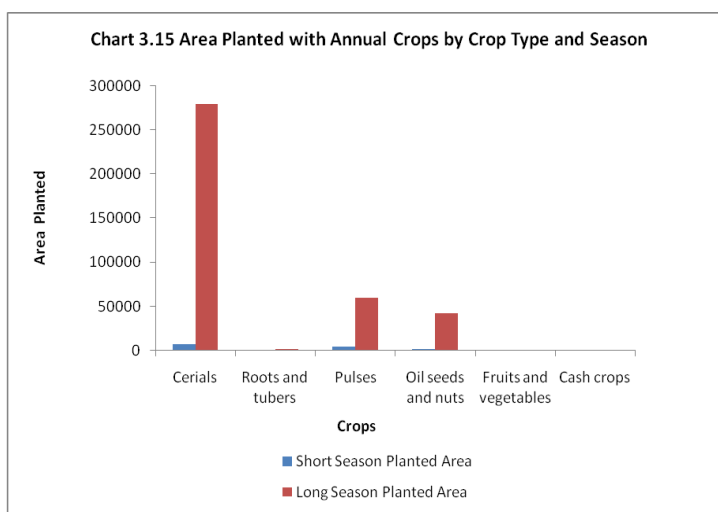


3.3.3 Crop Types

Cereals were the main crops grown in Manyara region. The area planted with cereals was 286,504 ha (72.3% of the total planted area), followed by pulses with 63,903 ha (16.1%), oil seeds (42,165 ha, 10.6%), roots and tubers (1,952 ha, 0.5%) and fruit and vegetables (954 ha, 0.2%). Cash crops had a planted area of about 982 ha (0.2%), (Chart 3.14). However, cereals, pulses and oil seeds were the dominant crops in both seasons; other crop types were of minor importance.



There was a big difference in the proportions of the different crop types grown between seasons and because short rainy season production was very small compared to long rainy season, it is inappropriate to make detailed comparisons between the two seasons, (Chart 3.15).



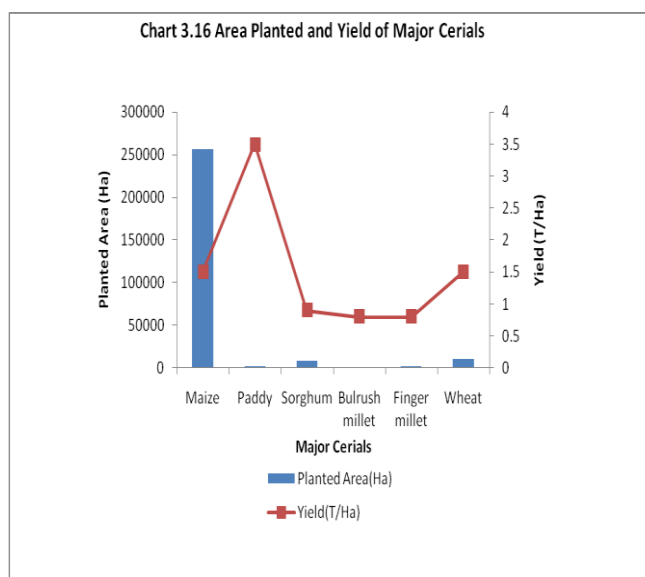
3.3.3.1 Cereal Crop Production

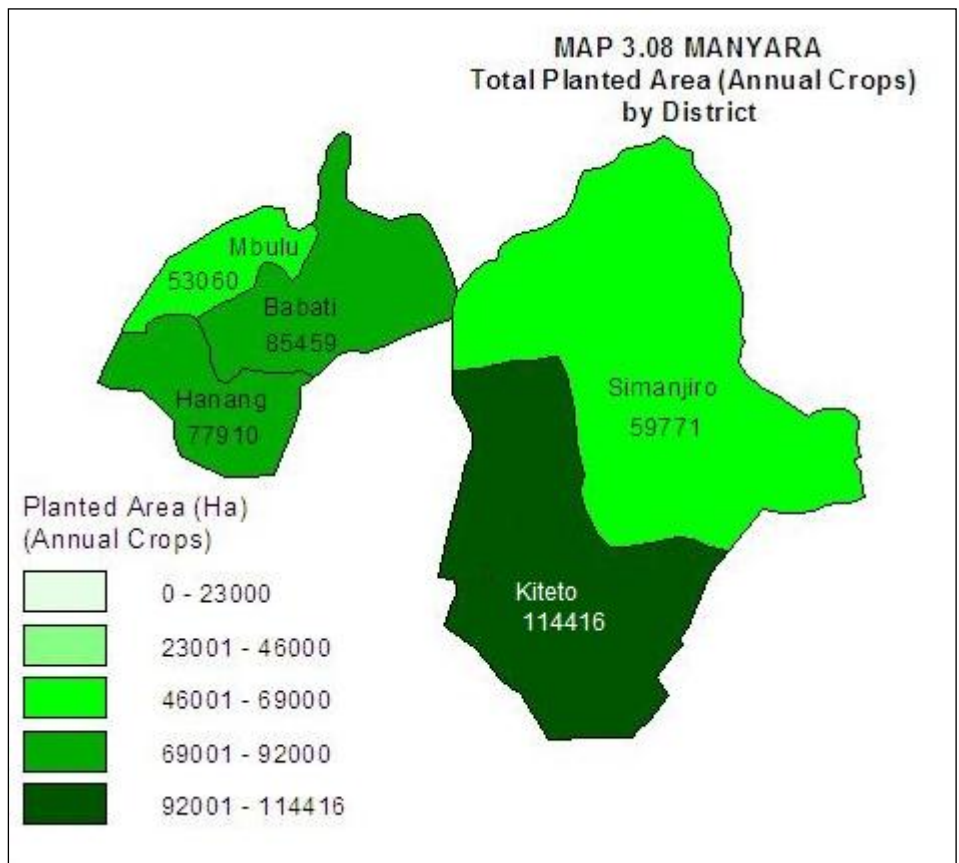
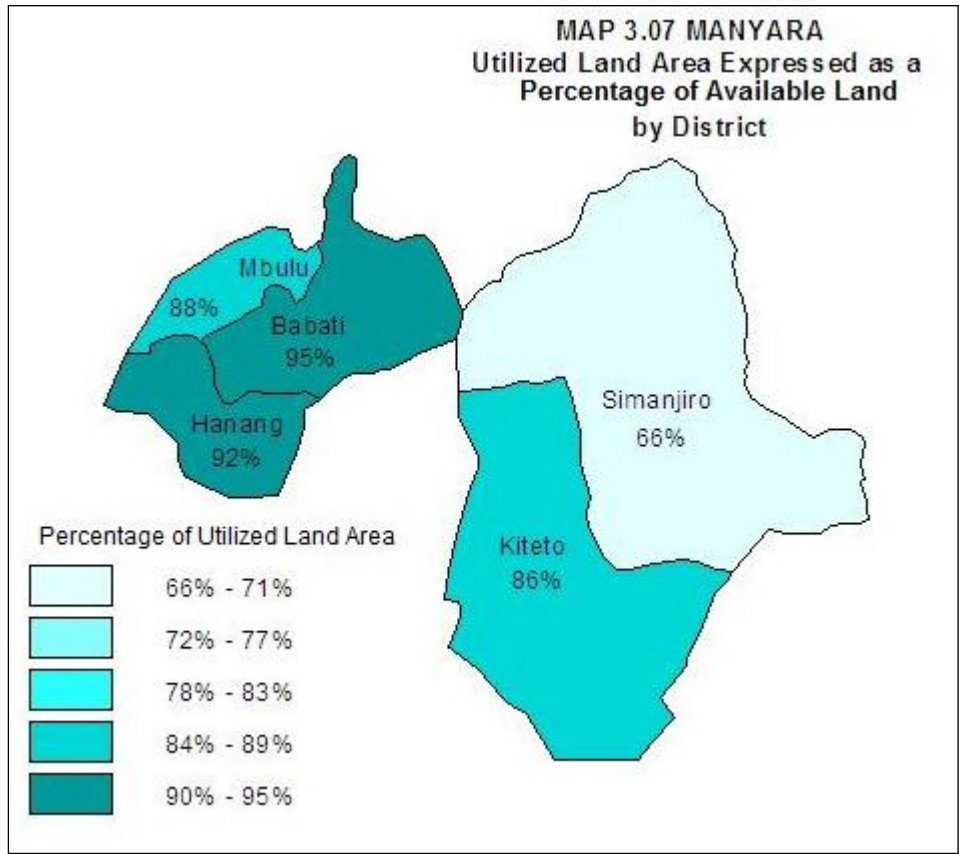
The total production of cereals was 435,312 tonnes. Maize was the dominant cereal crop with a production of 401,389 tonnes equivalent to 92 percent of the total cereal crops produced, followed by wheat (3.4%), paddy and sorghum (2 percent each), finger millet (0.4%), and bulrush millet (0.2%). Barley was not grown in Manyara region during the reference agricultural year. Kiteto district had the largest planted area of cereals in the region (96,900 ha) followed by Babati (67,332 ha), Hanang (46,606 ha), Simanjiro (40,123 ha), and Mbulu (35,543 ha), (Table 3.3, Map 3.10).

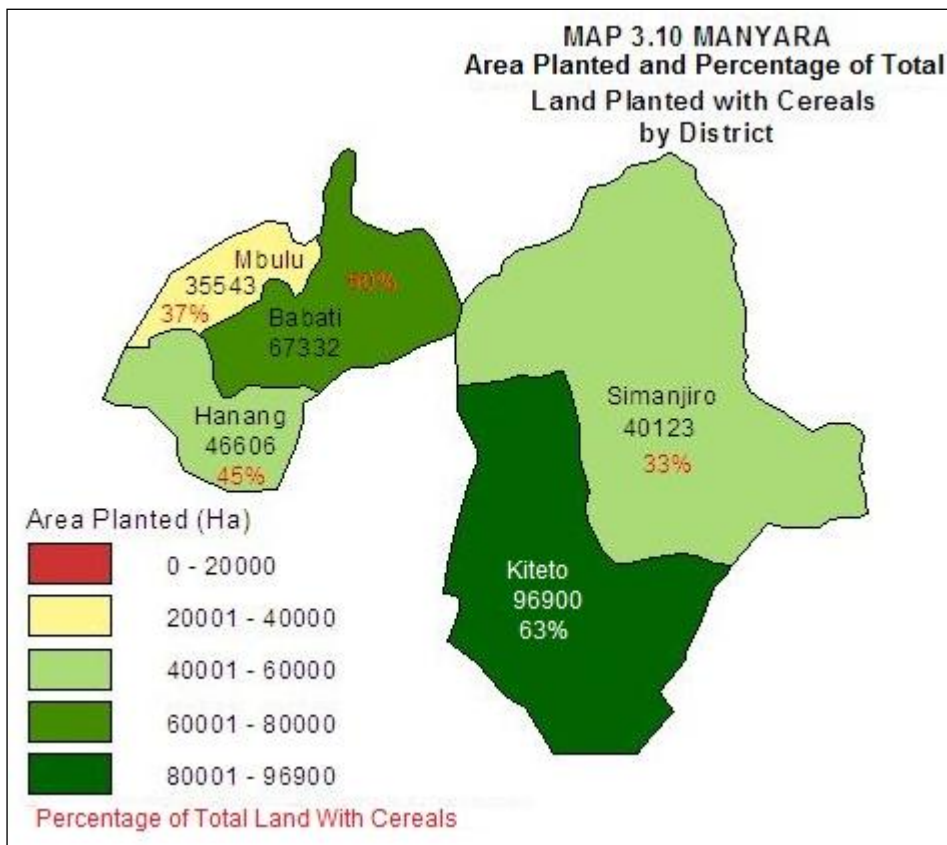
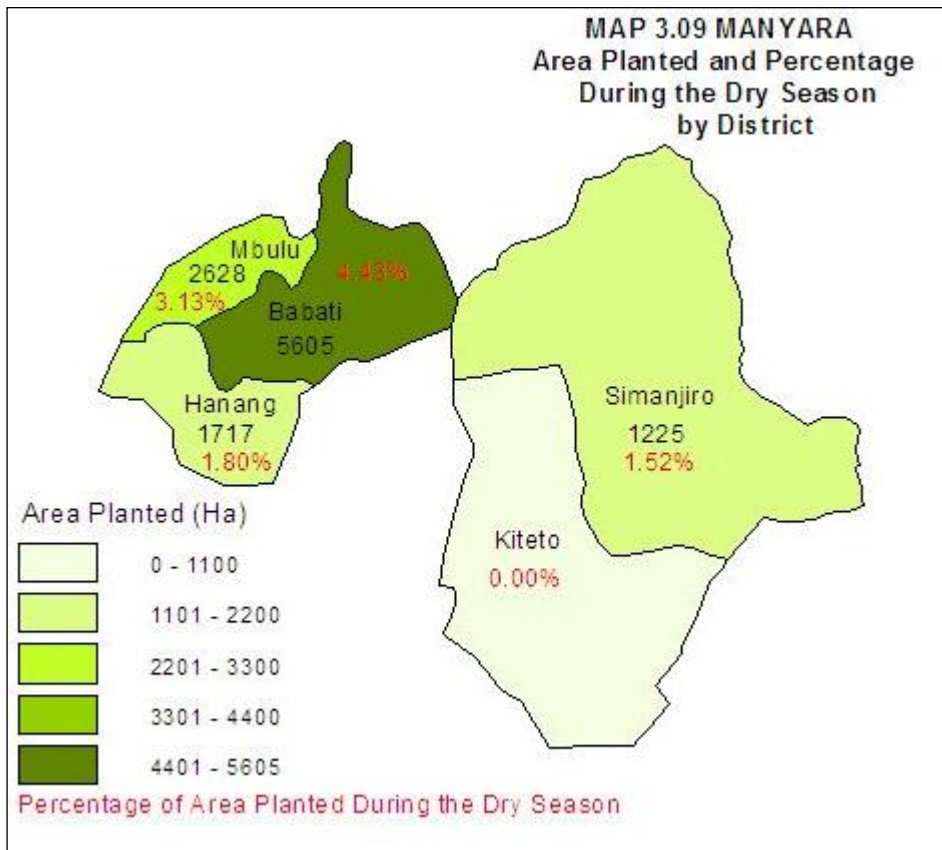
Table 3.3: Area, Production and Yield of Cereal Crops by Season

Crop	Short Rainy Season			Long Rainy Season			Short & Long Rainy Season			
	Area Planted (Ha)	Amount Harvested (T)	Yield (T/Ha)	Area Planted (Ha)	Amount Harvested (T)	Yield (T/Ha)	Area Planted (Ha)	Amount Harvested (T)	%	Yield (T/Ha)
Maize	6,150	13,815	2.25	256,163	387,573	1.51	262,313	401,389	92.2	1.53
Paddy	266	677	2.55	2,192	7,683	3.50	2,458	8,360	1.9	3.40
Sorghum	46	160	3.46	8,313	7,619	0.92	8,359	7,779	1.8	0.93
Bulrush Millet	-	-	-	968	796	0.82	968	796	0.2	0.82
Finger Millet	-	-	-	1,898	1,574	0.83	1,898	1,574	0.4	0.83
Wheat	314	290	0.92	10,194	15,124	1.48	10,508	15,414	3.5	1.47
Barley	-	-	-	-	-	-	-	-	-	-
Total	6,776	14,942	-	279,728	420,370	-	286,504	435,312	100.0	-

The total area planted with cereals during the agricultural year was 286,504 ha. Out of which 6,776 ha (2.4%) were planted in short rainy season and 279,728 ha (97.6%) were planted during the long rainy season. Therefore, the long rainy season accounted for 96.6 percent of the total cereals produced in both seasons. The area planted with maize during the long rainy season was 256,163 ha (91.6% of the total area planted with cereals in that season), whilst for the short rainy season, only 6,150 ha (91% of the total area planted with cereals in short rainy season), (Table 3.3). The area planted with maize was the largest representing 92 percent of the total area planted with cereal crops in both seasons, followed by wheat (3.7%), sorghum (2.9%), paddy (0.9%), finger millet (0.7%) and bulrush millet (0.3%). Paddy had the highest yield of 3.5 t/ha, followed by maize and wheat each with 1.5t/ha. The remaining crops (sorghum, Finger millet and bulrush millet) each had an estimated yield of 1t/ha, (Chart 3.16).

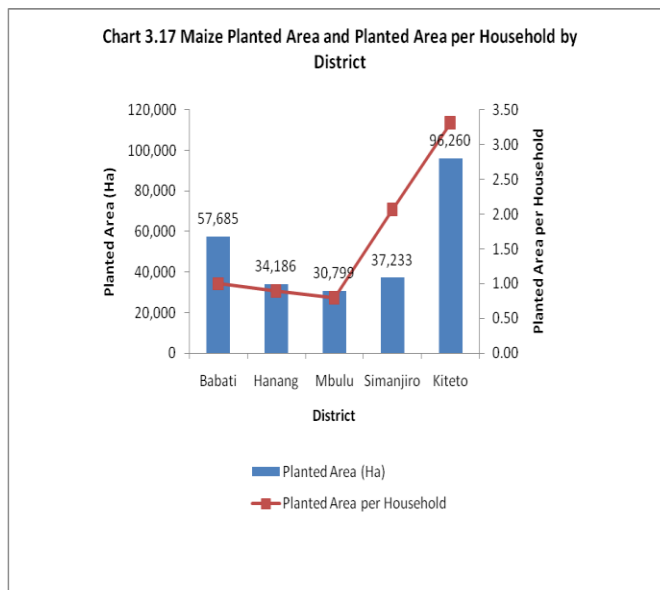






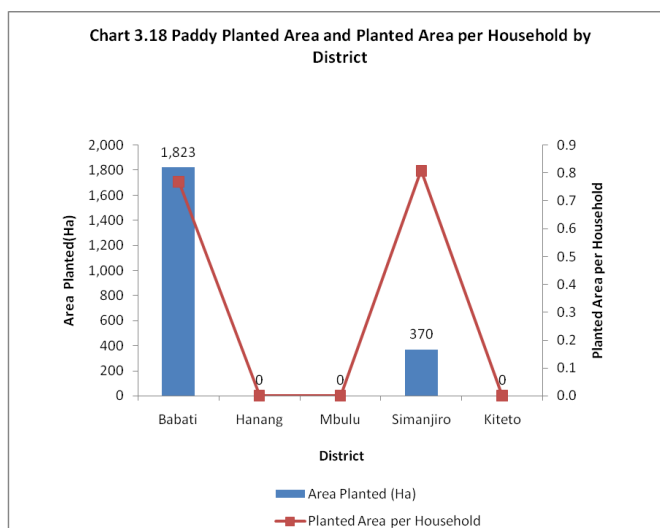
3.3.3.1.1 Maize

Maize dominated the production of cereal crops in Manyara region. The number of households growing maize in the region during the long rainy season was 182,128, (91.7% of the total annual crop growing households in the region during the long rainy season). The total production of maize during the long rainy season was 387,573 tonnes from a planted area of 256,163 hectares with an average yield of 1.5 t/ha. Chart 3.17 indicates that Kiteto district had the largest area of maize (96,260 ha) during the long rainy season, followed by Babati (57,685 ha), Simanjiro (37,233 ha), Hanang (34,186 ha) and Mbulu (30,799 ha), (Chart 3.17 and Map 3.11).



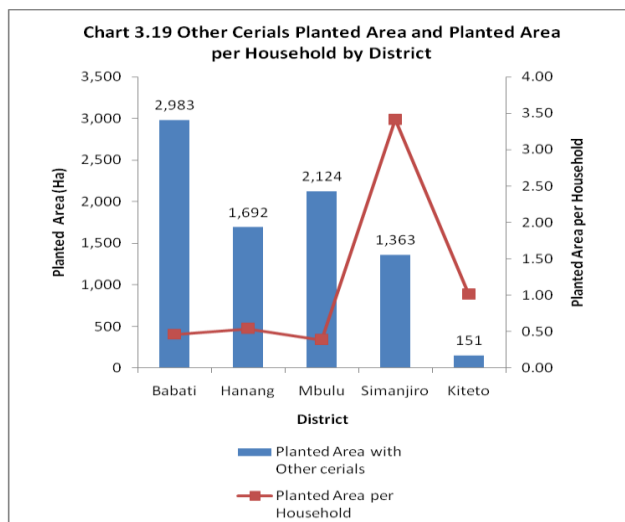
3.3.3.1.2 Paddy

Paddy is the second most important cereal crop in the region in terms of cereal production. The number of households that grew paddy in Manyara region during the long rainy season was 2,826. This represented 1.4 percent of the total crop growing households in Manyara region. The total production of paddy during the long rainy season was 7,683 tonnes from a planted area of 2,192 hectares resulting in a yield of 3.5 t/ha. During the long rainy season paddy was produced in Babati and Simanjiro only on land areas of 1,823 and 370 hectares respectively.



3.3.3.1.3 Other Cereals

Other cereal produced in the region is sorghum which is the second most important crop in terms of planted area. Sorghum was produced in all the districts by 15,627 households representing 7.9 percent of the total agricultural households in the region. Sorghum was produced at a land area of 8,313 ha resulting into a yield of 0.9 t/ha. The total production of sorghum in the long rainy season was 7619 tonnes.

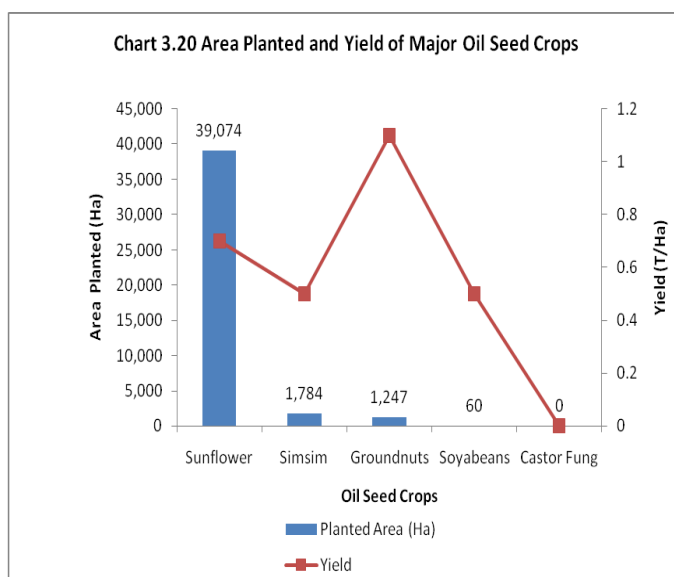


The district which had the largest planted area with sorghum was Babati (2,983ha, 36 percent of the planted area with sorghum in the district), followed by Mbulu (2,124 ha, 26%), Hanang (1,692 ha, 20%), and Simanjiro (1,410 ha, 16%). Kiteto had the smallest planted area with sorghum in the region (151ha, 2%). Although Simanjiro had the second smallest sorghum planted area, the district had the highest planted area per household (3.1ha/hh) (Chart 3.19).

3.3.3.2 Oil Seed Production

The total production of oilseed crops was 31,436 tonnes from a planted area of 42,165 hectares

During the long rainy season representing 8.1 percent of the total area planted with agricultural crops in the region. Sunflower was the most important oilseed crop with 39,074 ha (93% of the total area planted with oil seeds), followed by simsim (4.2%), and groundnuts (3%). The yield of

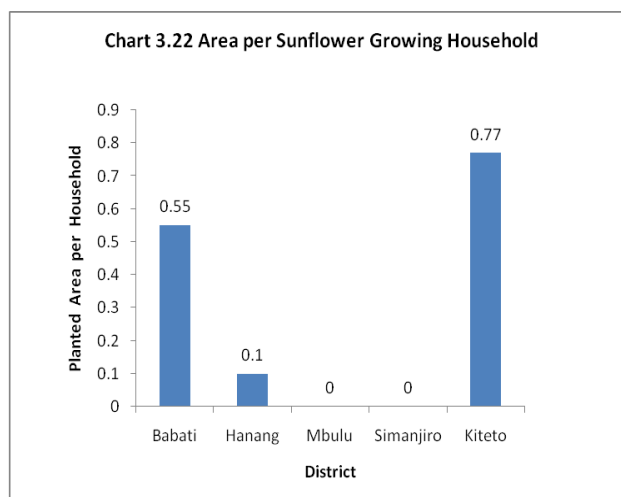
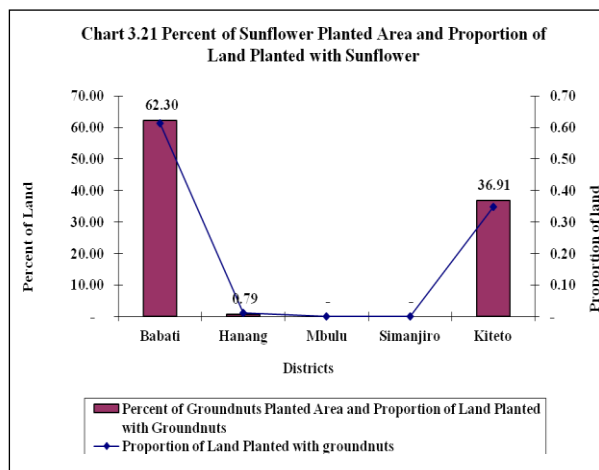


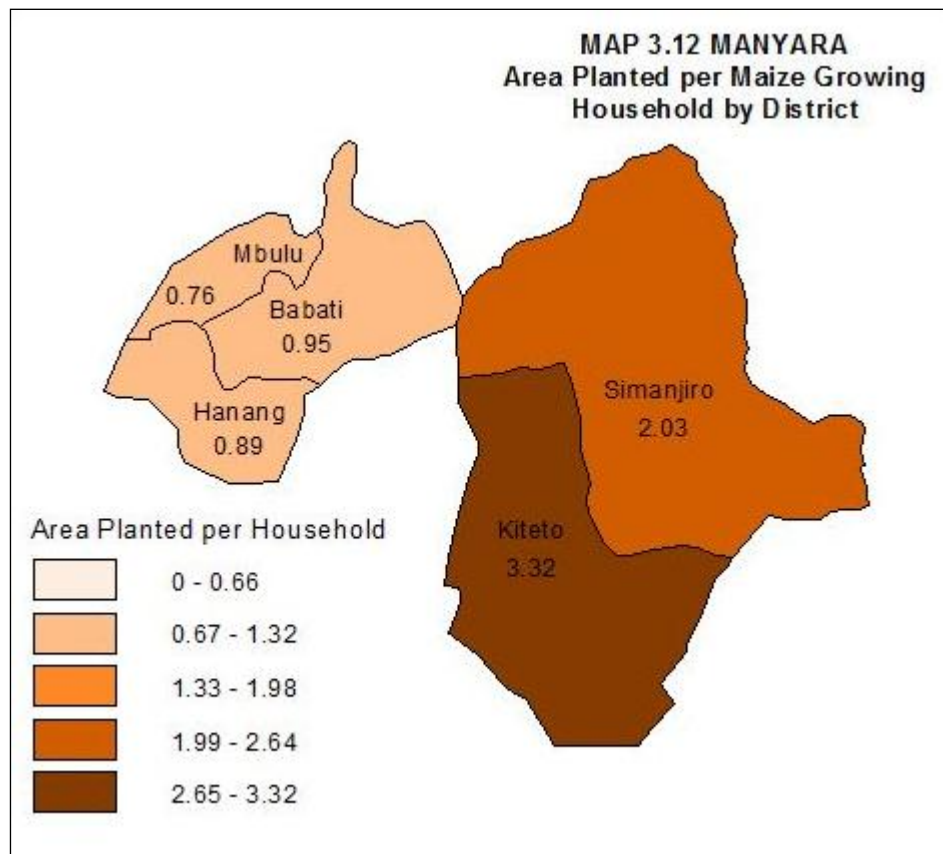
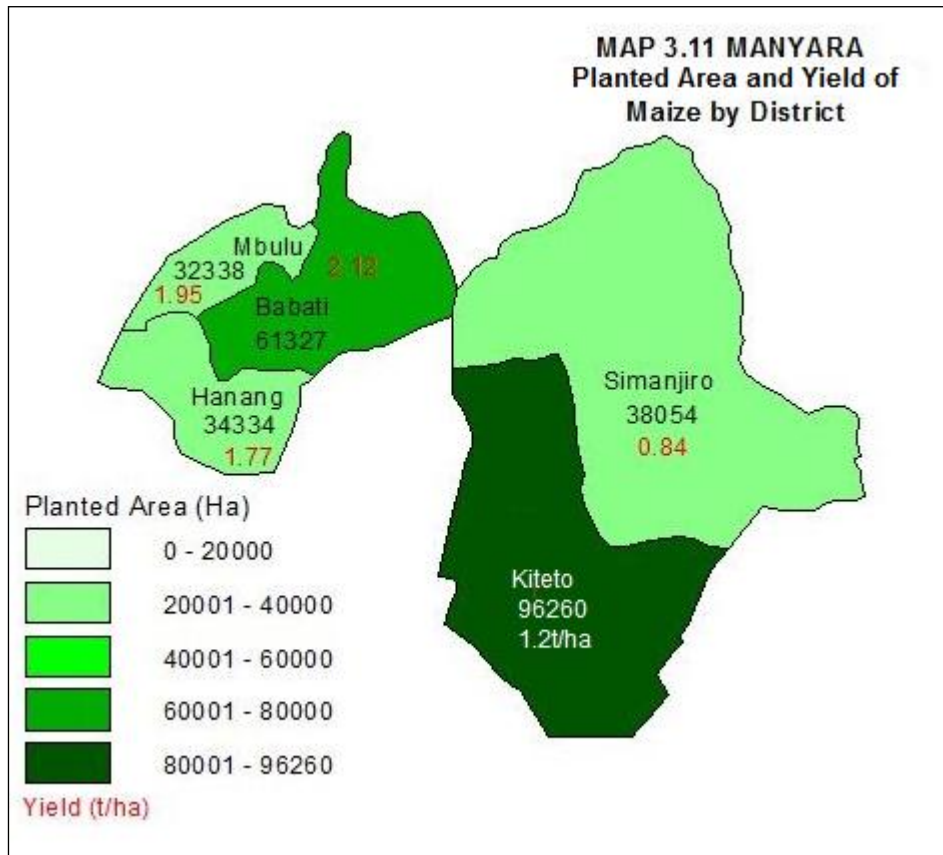
sunflower was moderate (0.8t/ha). Groundnut had a yield of 1.1t/ha and that of simsim was 0.5t/ha (Chart 3.20). In terms of production, sunflower produced 29,244 tonnes and accounted for 93 percent of the total production of oil seeds. This was followed by groundnut (4.2%) and simsim (3%).

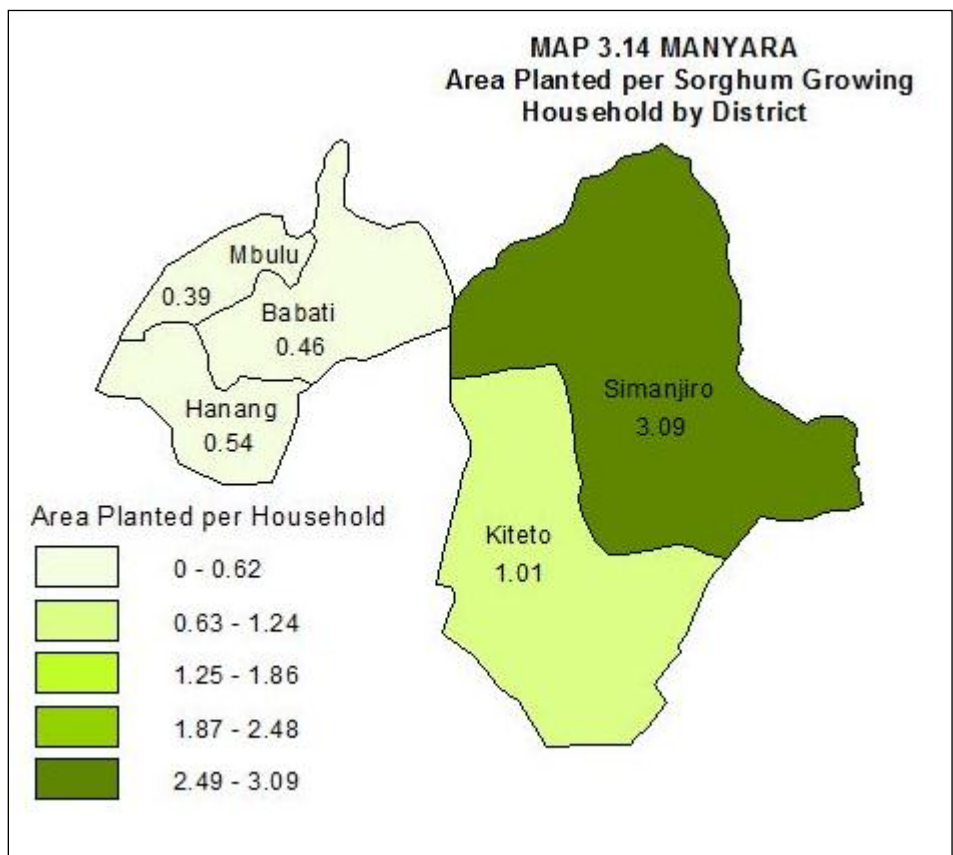
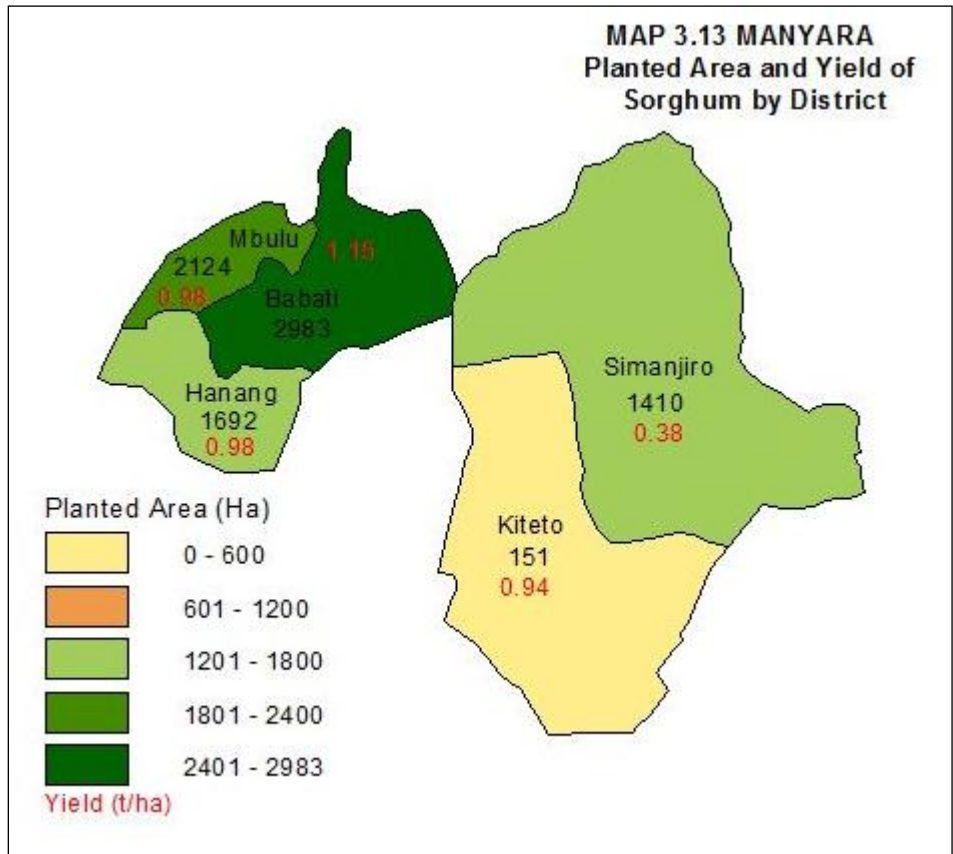
3.3.3.2.1 Sunflower

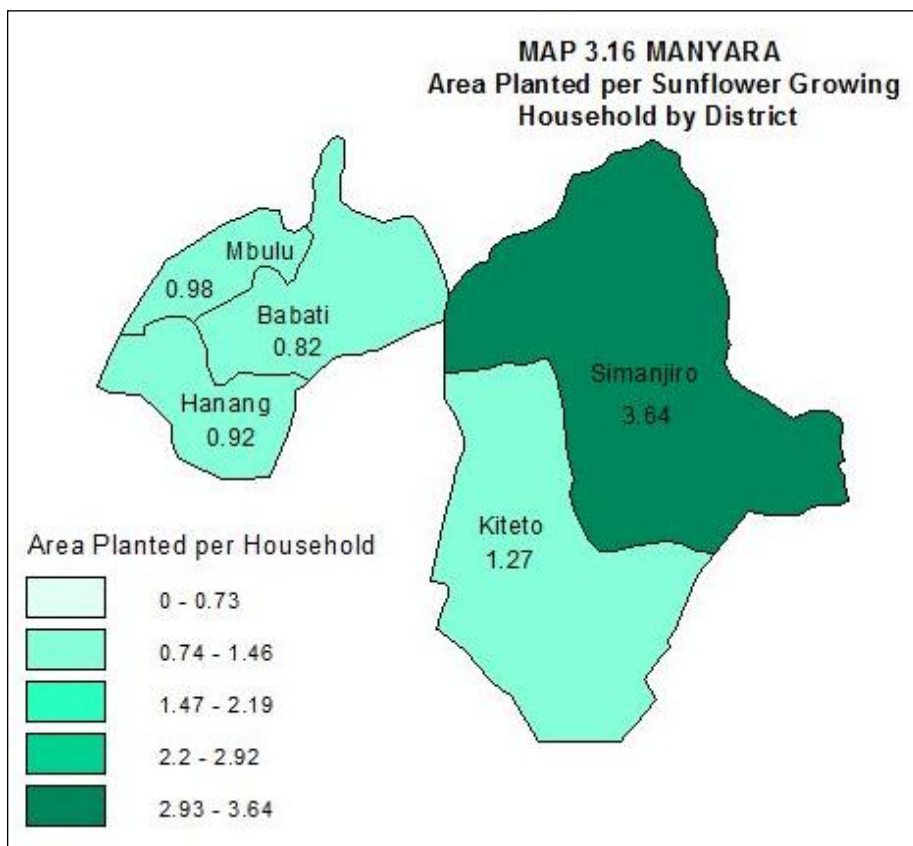
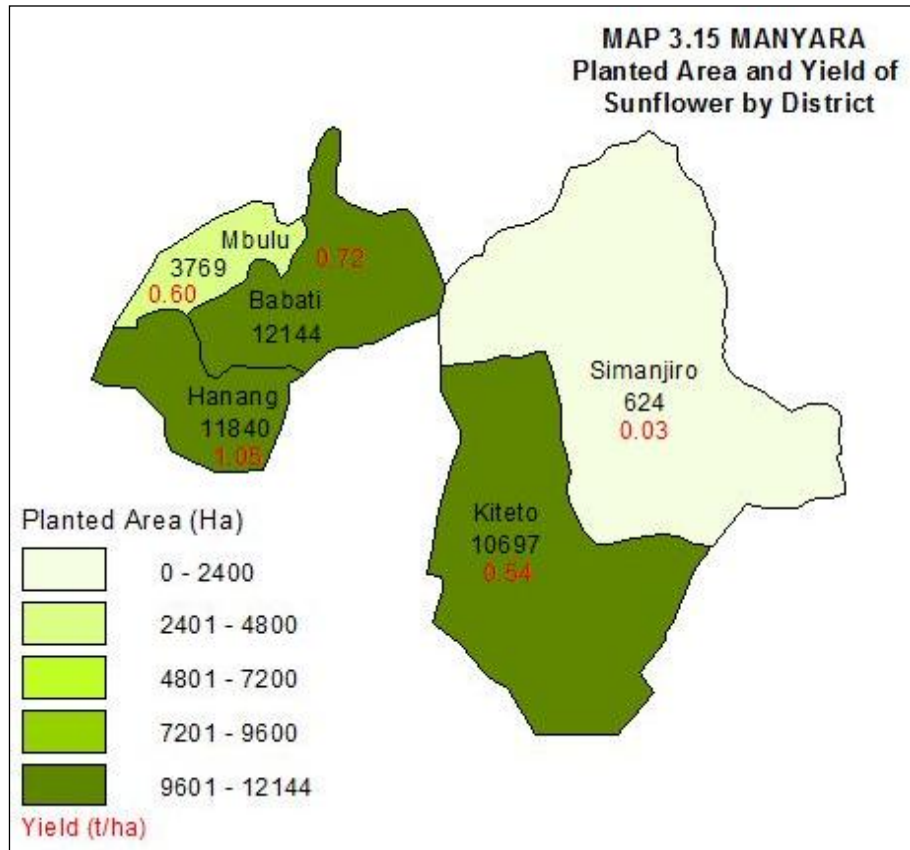
The number of households growing sunflower in Manyara region was 40,144. The total production of sunflower in the region was 29,244 tonnes from a planted area of 39,074 hectares in Babati district resulting in a yield of 0.5 t/ha. About 31 percent of the area planted with sunflower was located in Babati district (12,144 ha), followed by Hanang (11,840 ha, 30%). Kiteto (10,697 ha, 27%), Mbulu (3,769 ha, 10%) and Simanjiro district (674 ha, 2%) (Chart 3.21, Map 15).

Despite that Kiteto district had the second largest sunflower planted area, it had the largest area planted per sunflower growing household (0.8 ha/hh) and the smallest area planted per sunflower growing household was in Hanang (0.1). The range between the district with the largest and the smallest area planted per household depicts small variations in area planted per household among the districts (Chart 3.22) (Map 3.16).









3.3.3.3 Pulse Crops Production

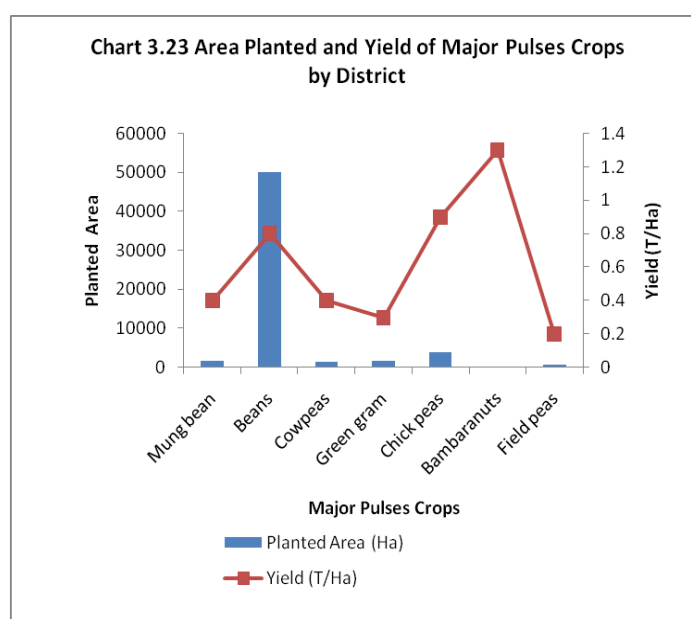
The total area planted with pulses was 63,903 hectares out of which 54,064 ha were planted with beans (84.6 percent of the total area planted with pulses), followed by chick peas (4,000 ha, 6.3%), mung bean (1,731ha, 2.7%), green gram (1,662 ha, 2.6), cowpeas (1,511 ha, 2.4%), field peas (624ha, 1%) and bambaranuts (310 ha, 0.5%). Field peas and bambaranuts were cultivated in small quantities (Table 3.4).

Table 3.4: Area, Production and Yield of Major Pulses

Crop Type	Number of Household	Planted Area (hectare)	Percent of Area Planted	Quantity Harvested (tons)	Percent of Quantity Harvested	Yield (T/Ha)
Mung Bean	97,179	1,731	2.7	757	1.5	0.44
Beans	2,588	54,064	84.6	44,350	88.5	0.82
Cowpeas	1,629	1,511	2.4	645	1.3	0.43
Green gram	3,901	1,662	2.6	476	1.0	0.29
Chick peas	623	4,000	6.3	3,413	6.8	0.85
Bambara nuts	628	310	0.5	373	0.7	1.20
Field Peas	-	624	1.0	119	0.2	0.19
Total	106,547	63,903	100.0	50,133	100.0	0.78

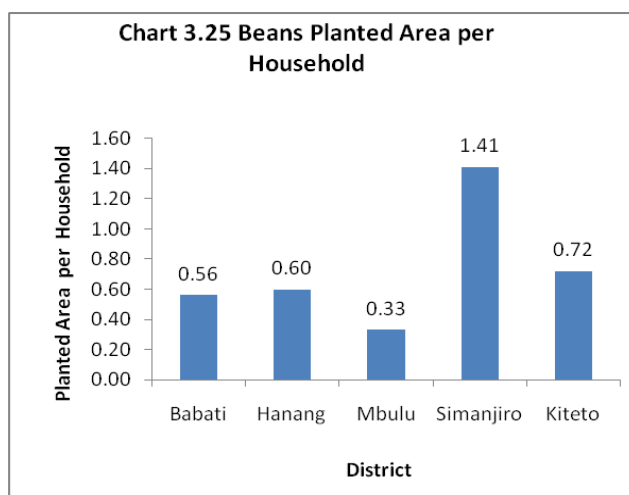
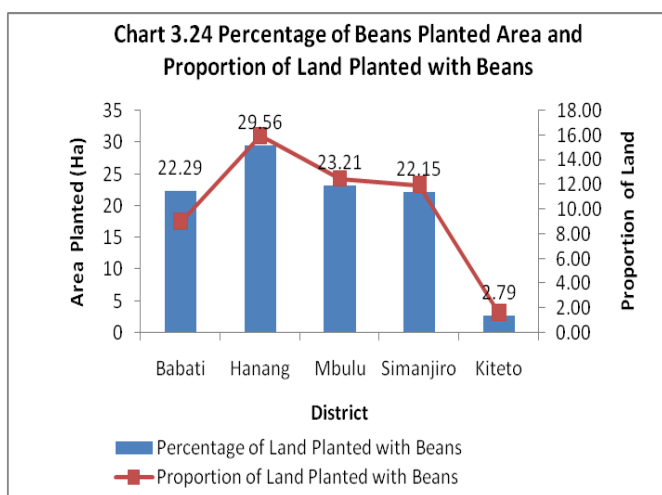
The total production of pulses was 50,133tonnes. Beans were the most cultivated crop producing 44,350 tonnes which accounted for 88.5percent of the total pulse production. This was followed by chick peas (3,413 tons, 6.8%), mung bean (757t, 1.5%), cow peas (645 tons, 1.3%), green gram (476t, 1%). bambaranuts (3738t, 0.7%), field peas (119t, 0.2%). However, bambaranuts were the highest yielding crop with 1.2t per hectare,

followed by chick peas and beans with 0.9 and 0.8 tons per hectare respectively. The yields of the rest of the pulses in tonnes per hectare were mung bean and cow peas each with 0.4 t/ha, green gram (0.3 t/ha), and field peas (0.2 t/ha), (Chart 3.23).



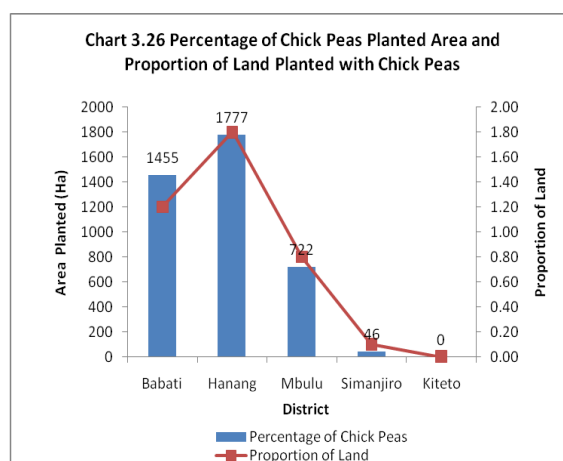
3.3.3.3.1 Beans

Beans dominated the production of pulse crops in the region. The number of households growing beans in Manyara region was 97,179 representing 49 percent of the total agricultural households. The total production of beans in the region was 44,350 tonnes from a planted area of 54,064 hectares resulting in a yield of 0.8 t/ha. The largest area planted with beans in the region was in Hanang district (19,982ha, 29.6%) (Chart 3.24 and Map 3.17). The largest area planted with beans per beans growing household was in Simanjiro district (1.4 ha/hh), whilst the smallest was in Mbulu district (0.3%). The average planted area per household in the region during the long rainy season was 0.6 ha/hh. The variations in planted area with beans per household for the rest of the districts were ranging from 0.3 ha/hh in Mbulu district to 0.7 ha/hh in Kiteto district, (Chart 3.25 and Map 3.18).

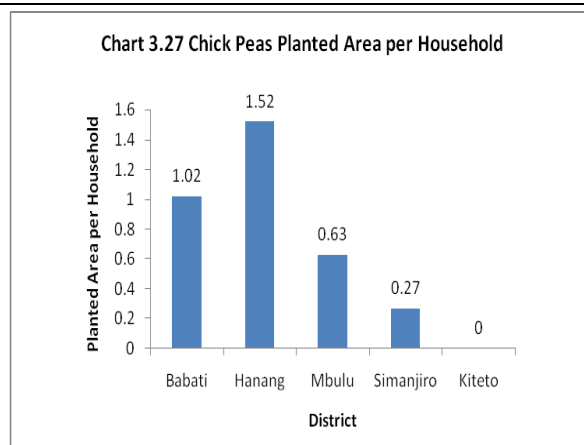


3.3.3.3.2 Chick peas

The number of households growing chick peas in Manyara region in the long rainy season was 1,138. This represents 2 percent of the total crop growing households in the region. The total production of chick peas during the census year was 3,413 tonnes from a planted area of 4,000 hectares resulting in a yield of 0.9 t/ha. The area planted with chick peas accounted for 0.8 percent of the total area planted with annual crops and vegetables. Hanang district had the largest planted area of chick peas (1,777 ha, 44.4%), followed Babati (1,455.08 ha, 36.4%), Mbulu (722.30 ha, 18.1%), and Simanjiro (46 ha, 0.1%).



However, chick peas were not grown in Kiteto district, (Map 3.18). The highest proportion of land planted with chick peas was in Hanang (1.5%) The average chick peas planted area per chick peas growing household was 0.8 hectares. However, there were variations across districts with Hanang having the largest chicken peas planted area per household (1.5ha/hh), followed by Babati (1.0ha/hh) and Mbulu with (0.6ha/hh). Simanjiro had the lowest at 0.3ha/hh. Chick peas were not grown in Kiteto (Chart 3.27 and Map 3.19).

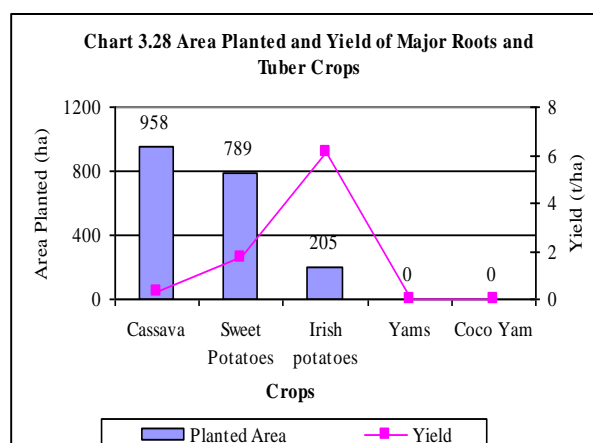


3.3.3.4 Roots and Tuber Crops Production

The total production of roots and tubers was 2,955 tonnes. The production of sweet potato and Irish potatoes productions were the highest of all other root and tuber crops in the region with a total production of 1,368 and 1,256 tonnes respectively. The two crops represented 89 percent of the total root and tuber crops production. These were followed by cassava with 331 tonnes (11%). The area planted with cassava was the largest of all other root and tuber crops in the region with a planted area of 958 ha (0.2 % of the total area planted with annual crops) and it accounted for 49 percent of the area planted with roots and tubers, followed by sweet potatoes (789 ha,40%), Irish potatoes (205 ha,10%) (Chart 3.28, Table 3.5). It is difficult to determine the total planted area and production for the short and long rainy seasons for roots and tubers as the total production of cassava has been reported under the long rainy season. However, excluding cassava, almost 91.3 percent of roots and tubers were grown in the long rainy season and only 8.7 percent were grown in the short rainy season.

Table 3.5:Area, Production and Yield of Major Roots and Tuber Crops in Wet and Dry Season

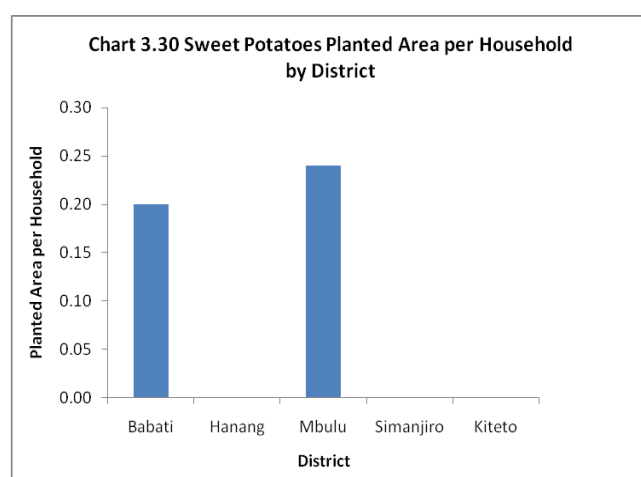
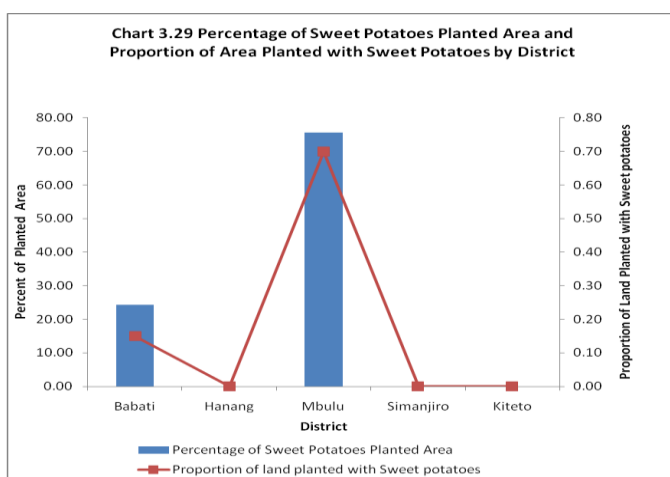
Crop	Number of Household	Planted Area (hectare)	Quantity Harvested (tons)	Yield
Cassava	878	958	331	0.35
Sweet Potatoes	3,430	789	1,368	1.73
Irish potatoes	1,094	205	1,256	6.13
Yams	-	-	-	-
Coco Yam	-	-	-	-
Total	5,618	1,952	2,955	



3.3.3.4.1 Sweet Potatoes

The number of households which grew sweet potatoes in Manyara region was 3,430 representing 1.8 percent of the total crop growing households in the region. The total production of sweet potatoes during the reference agricultural year was 1,368 tonnes from a planted area of 789 hectares giving a yield of 1.7 t/ha. The area planted with sweet potatoes accounted for 0.2 percent of the total area planted with annual crops and vegetables.

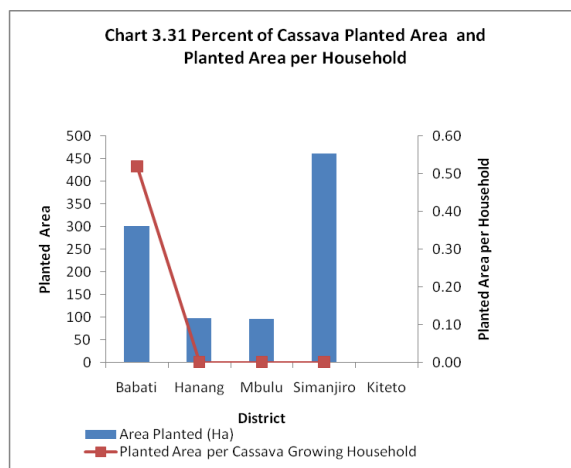
Mbulu district had the largest planted area of sweet potatoes (598 ha, 75.7%) followed by Babati (24.3%). In the same sequence, Mbulu had the highest proportion (0.7%) of the total land planted with sweet potatoes followed by Babati with 0.2 percent of the land, (Chart 3.29).



The average area planted with sweet potatoes per sweet potatoes growing household was 0.2 hectares. However, there were slight district variations between the two districts with Mbulu having 0.24 ha/hh, and Babati having the lowest at 0.20 ha/hh. However, sweet potatoes were not grown in Kiteto, Simanjiro, and Hanang districts, (Chart 3.30 and Map 3.19).

3.3.3.4.2 Cassava

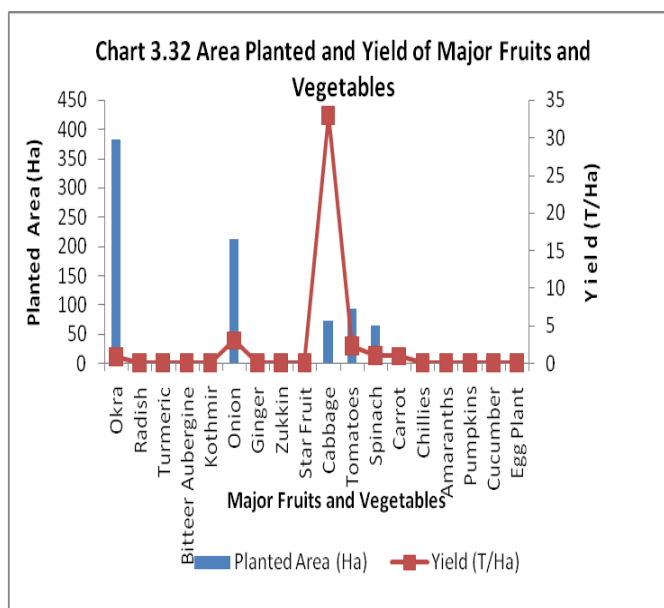
The number of households growing Cassava in Manyara region was 878. This was 0.4 percent of the total crop growing households in the region. The total production of Cassava during the census year was 331 tonnes from a planted area of 958 hectares resulting in a yield of 0.3t/ha. Simanjiro district had the largest planted area of cassava (462 ha, 48.3%) followed by Babati (301ha, 31.4%), Hanang (99 ha, 10.3%), and Mbulu (96 ha, 10.1%). Cassava was not grown in Kiteto district, (Chart 3.31, Map 19, 20).



3.3.3.5 Fruit and Vegetables

The collection of fruits and vegetables production data was difficult due to the small quantities produced per household. Most of the data presented here gives the production of smallholders who grew these crops as cash crops and not merely for household consumption. Most fruit production is from permanent crops and only water melon is reported as an annual crop in this section. The production of fruit and vegetables were mainly during the long rainy season.

The total production of fruits and vegetables was 4,723 tonnes. The most cultivated fruit and vegetable crop was cabbage with a production of 2,383 tonnes (50.59% of the



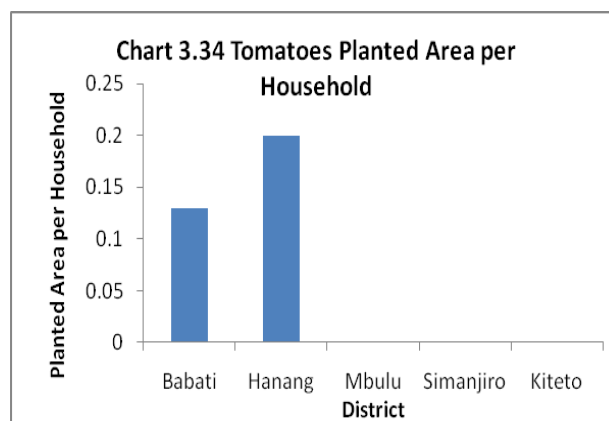
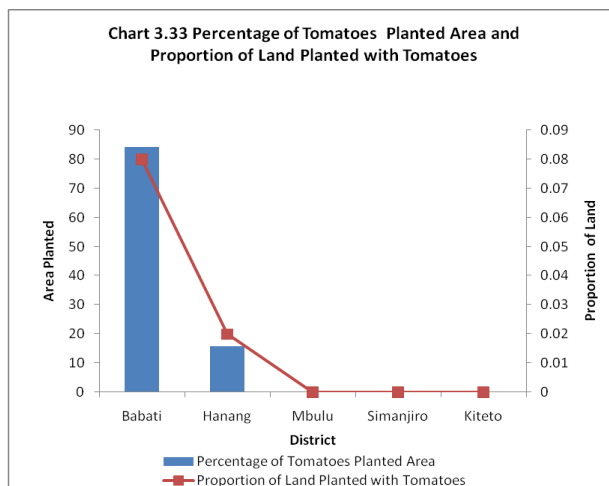
total fruits and vegetable production), followed by tomatoes (782 tonnes, 16.6%), onion (658 tonnes, 14%). The production of other fruits and vegetable crops was relatively small accounting to less than ten percent of the total fruits and vegetable production, (Table 3.6). Cabbage had the highest yield of 33 tonnes per hectare followed by chillies (11.6 t/ha), tomatoes (6.3 t/ha) and water melon (4.8 t/ha). The yield of the rest of the fruits and vegetables grown in the region were relatively small accounting to less than 4 tonnes per hectare, (Chart 3.32 and Table 3.6).

Table 3.6: Area, Production and Yield of Fruits and Vegetables

Crop	SHORT RAINY SEASON			LONG RAINY SEASON			SHORT & LONG RAINY SEASON		
	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Okra	4	4	1.03	382	304	0.8	386	308	0.8
Onion	32	32	0.99	212	626	2.96	244	658	2.7
Cabbage	.	.	.	72	2,383	32.98	72	2,383	32.98
Tomatoes	32	569	17.78	93	213	2.3	125	782	6.27
Spinach	4	32	7.06	64	64	1	69	96	1.4
Carrot	.	.	.	3	3	0.89	3	3	0.89
Chillies	36	415	11.58	.	.	.	36	415	11.58
Pumpkins	.	.	.	4	0	-	4	0	-
Water Mellon	16	79	4.94	.	.	.	16	79	4.94
Total	124	1,129	9.1	830	3,593	4.33	954	4,723	4.95

3.3.3.5.1 Tomatoes

The number of households growing tomatoes in the region during the long rainy season was 887 in the census year. This accounted for 0.4 percent of the total number of crop growing households in the region. Babati district had the largest planted area of tomatoes (105ha, 84.2%, of the total area planted with tomatoes in the region), followed by Hanang (58.51 ha, 15.8%). However, Hanang had the largest area per tomato growing households with 0.2 hectares per household while Babati had the lowest with 0.13 ha/hh. Tomatoes were not grown in Mbulu, Kiteto and Simanjiro. The total area planted with tomatoes accounted for 0.02 percent of the total area planted with annual crops and vegetables during the short and long rainy seasons (Chart 3.33, Chart 3.34).



3.3.3.5.2 Onions

The number of households growing onions was 809 in the region in the short and long rainy seasons. This represented 0.4 percent of the households growing crops in the region during the short rainy and the long rainy seasons. Hanang district had the largest planted area of onions (77% of the total area planted with onions in the region) followed by Babati (14.4%) and Mbulu (8.6%). Simanjiro and Kiteto districts were not involved in the production of onion in the region, (Chart 3.35, Map 3.20). The largest area planted per onion growing household in the long rainy season was in Hanang district (0.5 ha) followed by Mbulu (0.2 ha/hh), and Babati (0.1 ha/hh). The total area planted with onion accounted for 0.05 percent of the total area planted with annual crops and vegetables, (Table 3.7)

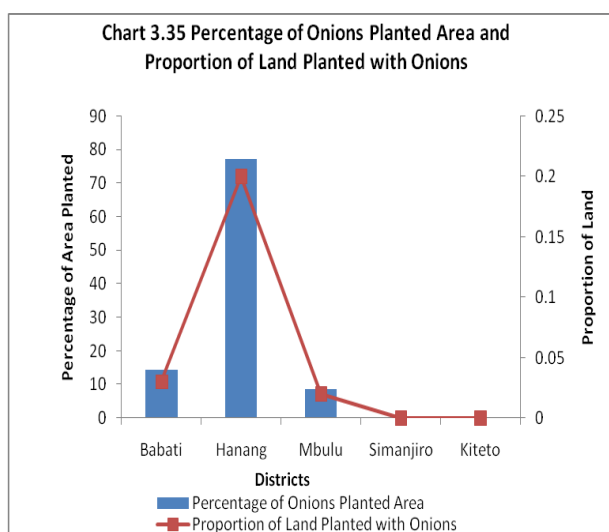
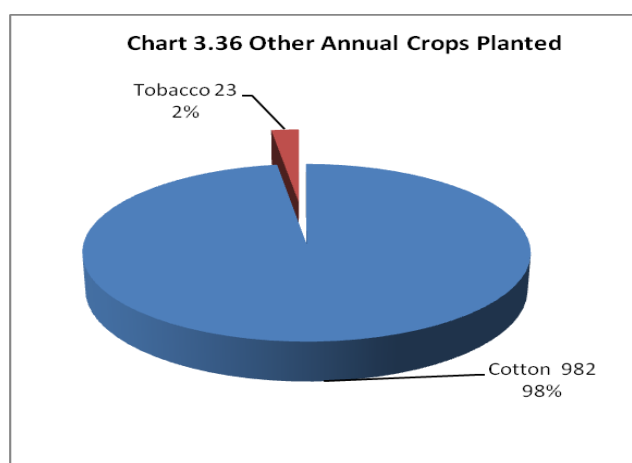


Table 3.7: Percentage of Onions Planted Area and Planted Area per Household by District

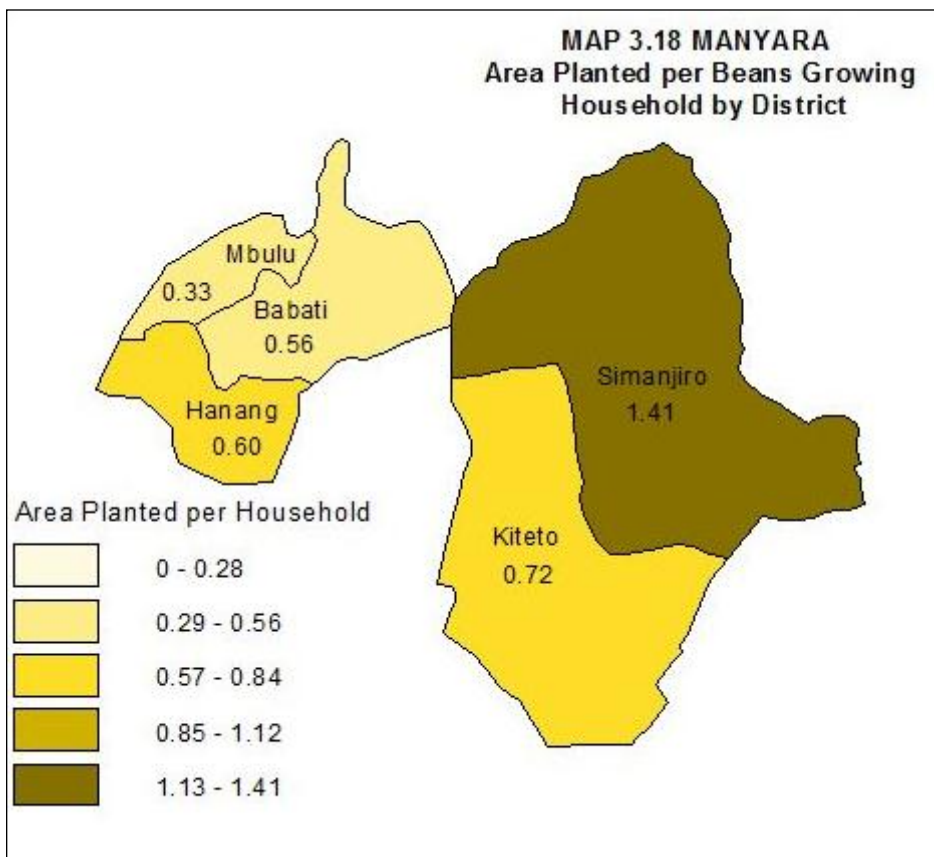
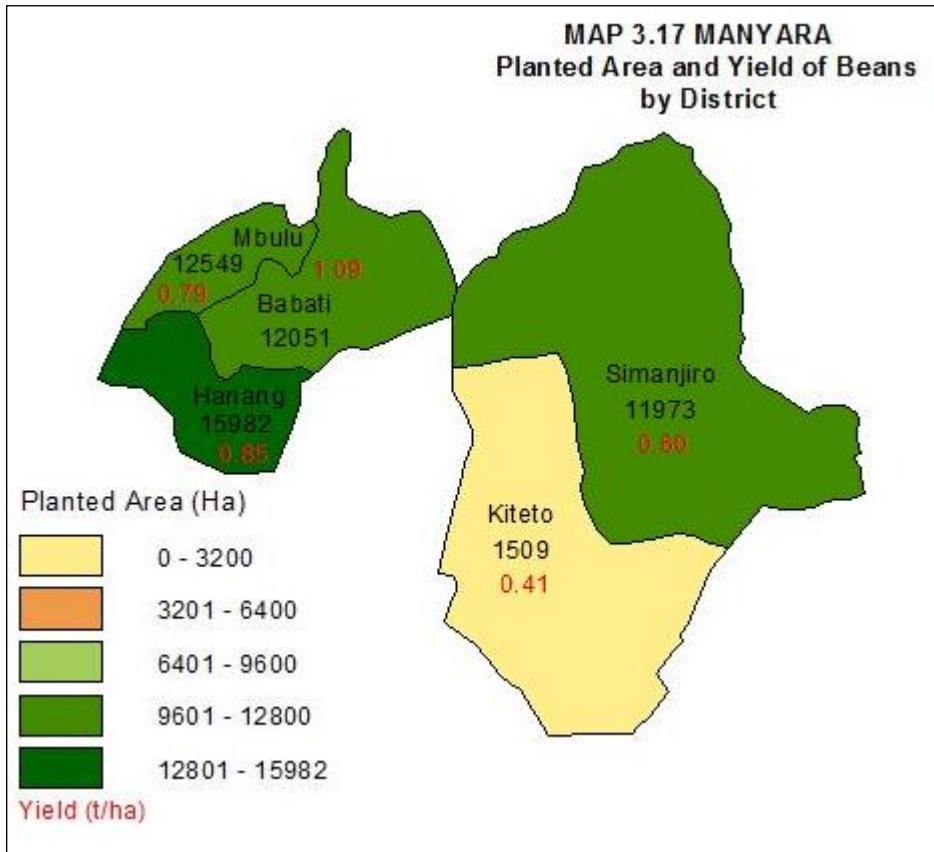
District	Number of Households	Area Planted (Ha)	Quantity Harvested (T)	Yield (T/ha)	Total Planted Area	Percent Onions Planted Area	Proportion of Land Planted with Onions	Planted Area per Household
Babati	316	35	42.33	1.2	126,599	14.44	0.03	0.11
Hanang	390	188	548.33	2.9	95,432	76.97	0.20	0.48
Mbulu	103	21	67.02	3.2	84,032	8.59	0.02	0.20
Simanjiro	0	0	0	-	80,663	-	-	-
Kiteto	0	0	0	-	132,171	-	-	-
Total	809	244	658	2.7	518,897	100.00	0.05	0.30

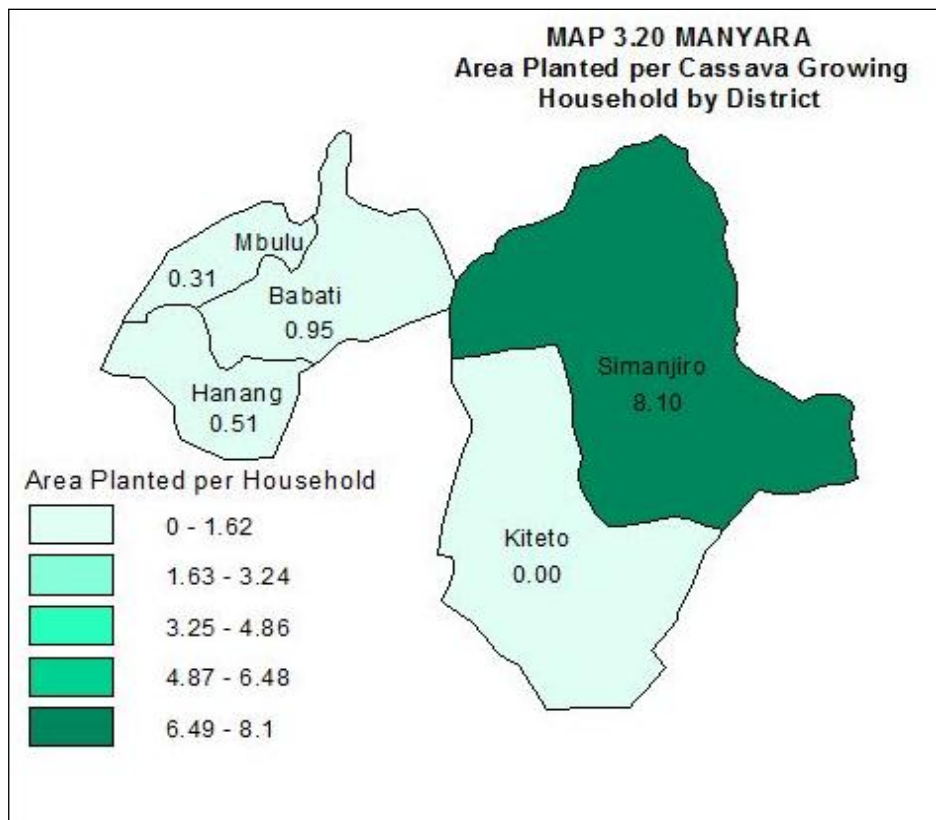
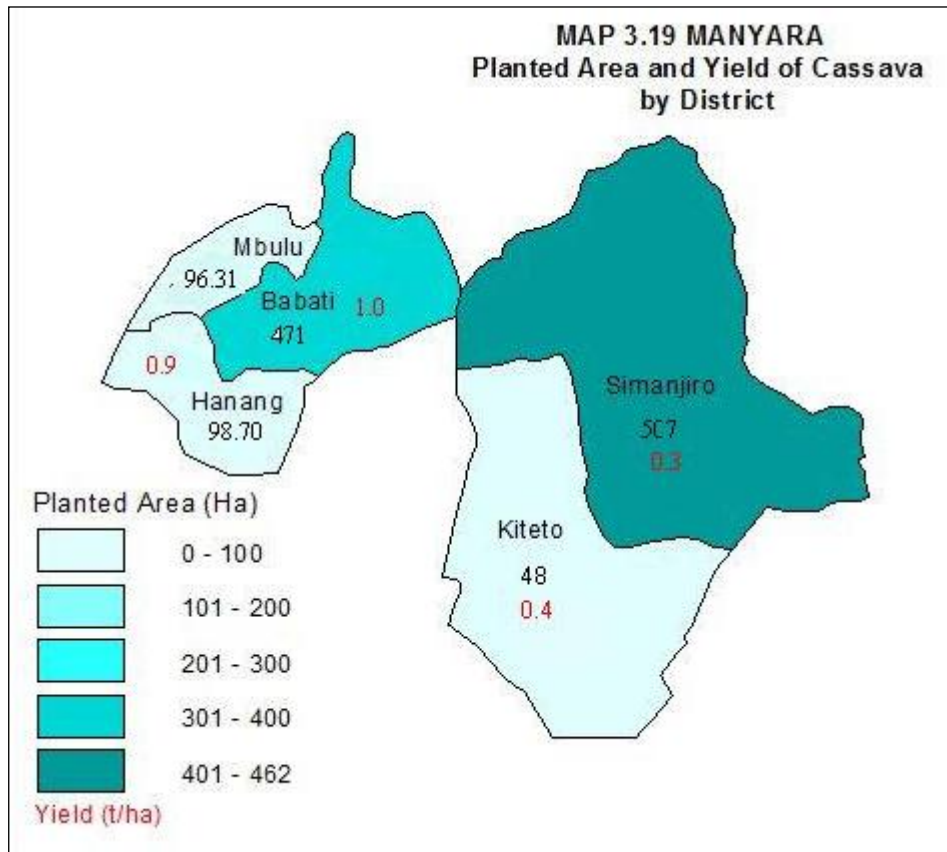
3.3.3.6 Other Annual Crop Production

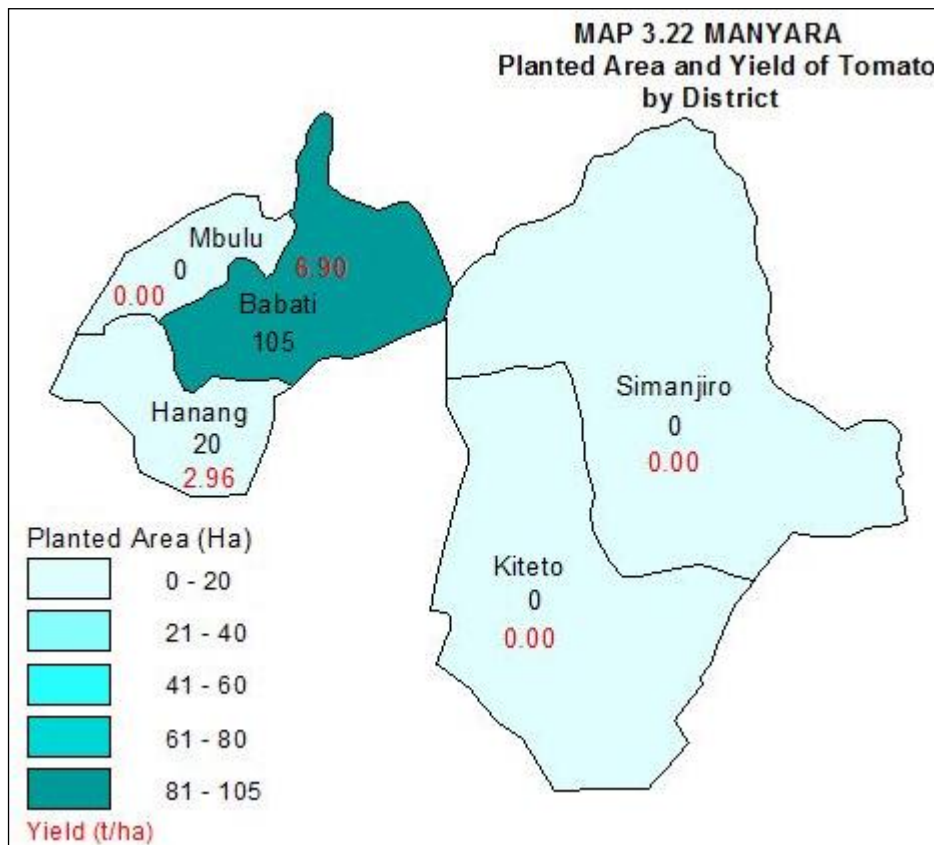
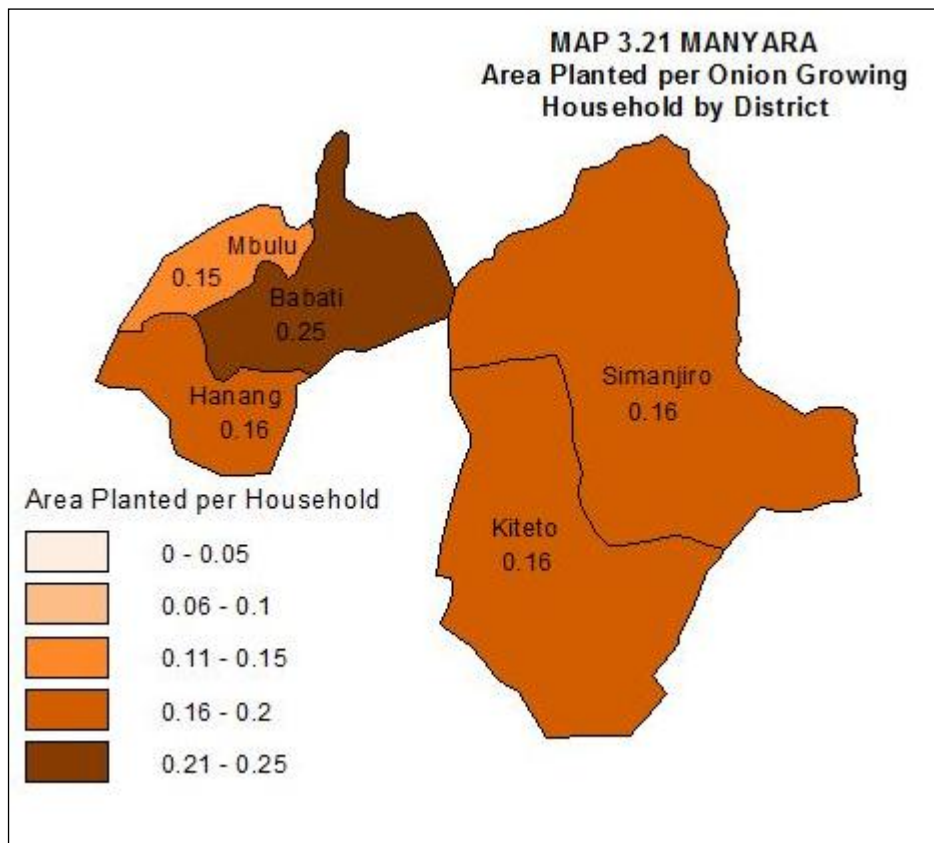
Most of the other annual crops are cash crops, which were cotton and tobacco. Cotton was grown in a total planted area of 982 hectares, accounting to 98 percent of the total area planted with other annual crops in the region. Tobacco was planted in an area of 23 hectares accounting for only 2 percent of the total area planted with other annual crops. The production

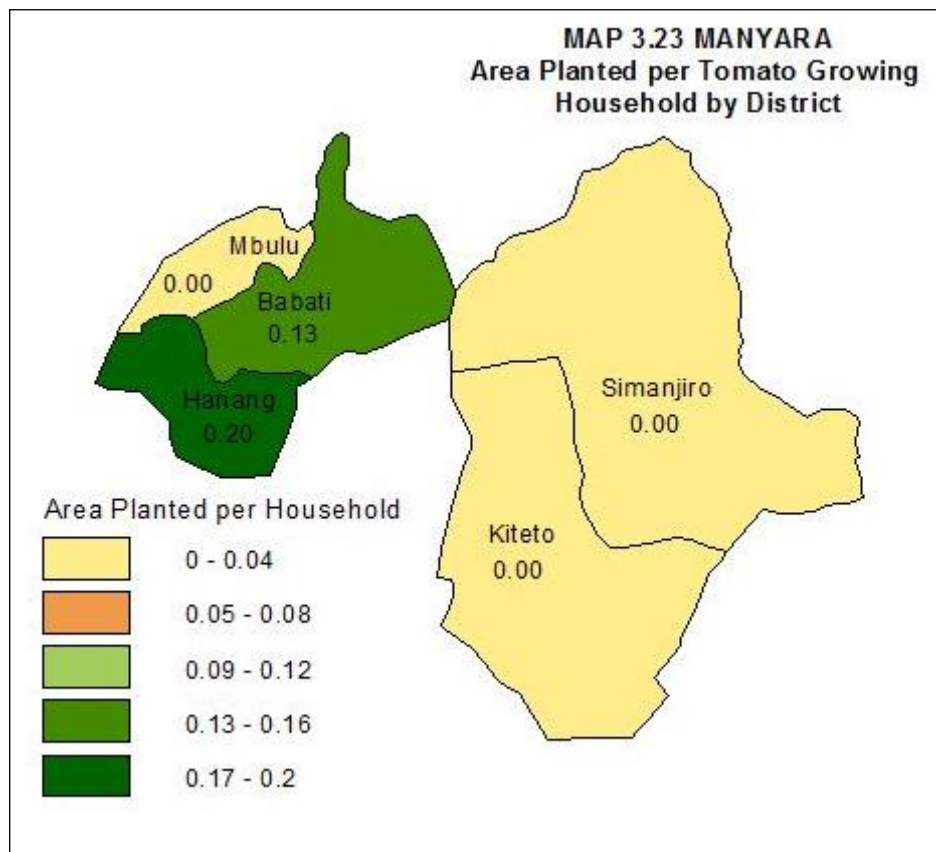


of cotton was 1,459 tonnes with an average yield of 1.5 t/ha, while that of tobacco was 23 hectares with a yield of 0.9 t/ha, (Chart 3.36). Babati was the only district which grew cotton in the region by 632 households accounting to 0.3 percent of the total annual crop growing households in the region.



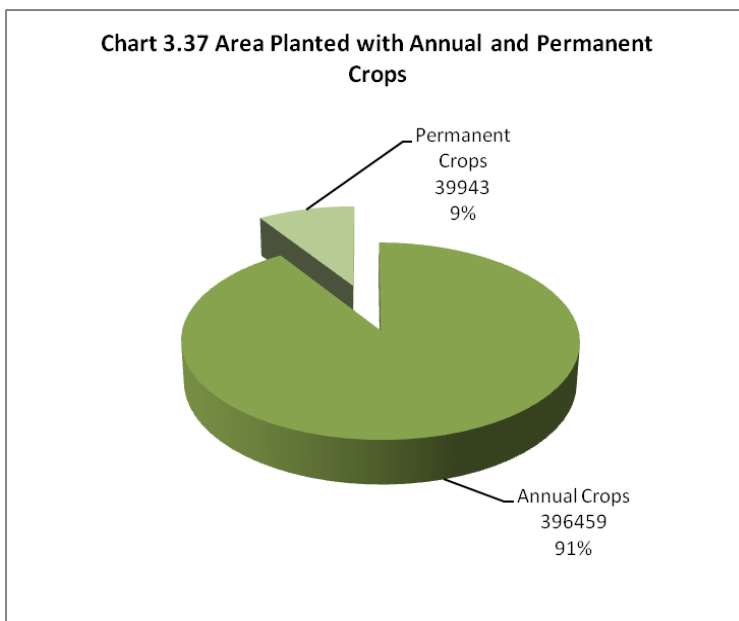




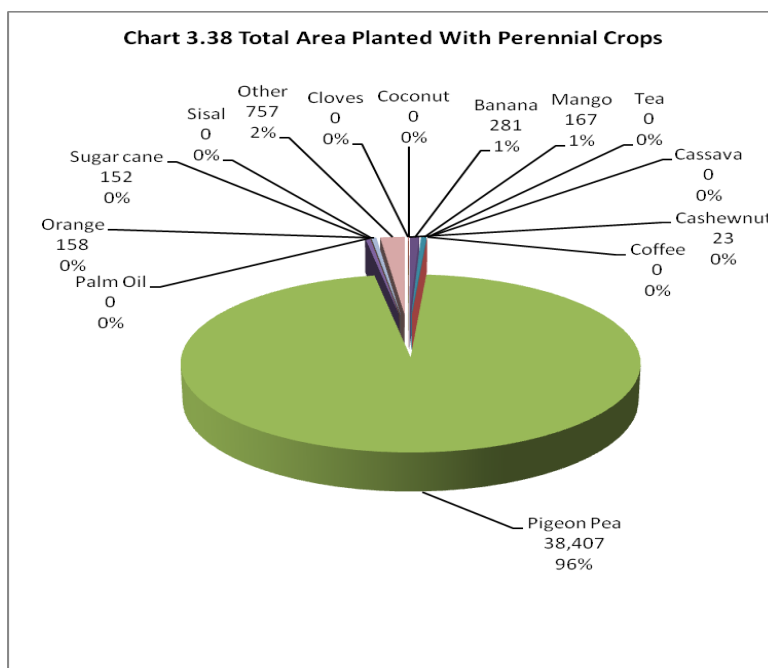


3.4 Permanent Crops

Permanent crops (sometimes referred as perennial crops) are crops that normally take over a year to mature and once matured, can be harvested for a number of years. For most crops, it is easy to determine if they are annual or permanent. However, for crops like cassava and bananas, the distinction is not so clear. Cassava has varieties that mature within a year and produces only one harvest, whilst other varieties survive for more than one year and produces several harvests. In this census therefore, cassava was treated as an annual crop.



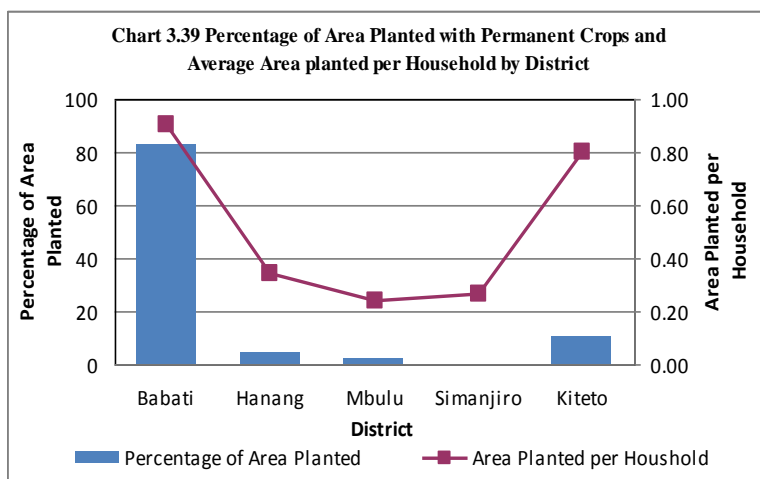
Conversely, bananas normally take less than a year to mature, survive for more than one year and are thus treated as a permanent crop. In this report, the agricultural census results are presented for the most important permanent crops in terms of production, yield and planted area. Previous censuses and surveys did not measure these variables for permanent crops, therefore, no time series analysis is made in this section. The area of smallholders planted with



permanent crops was 39,943 hectares (9% of the area planted with annual and permanent crops in the region). However, the area planted with annual crops is not the actual physical land area as it includes all the areas of crops planted more than once on the same land, whilst the planted area for permanent crops is the same as the physical planted land area. So, the percentage area planted with permanent crops would be higher than that indicated in Chart 3.37.

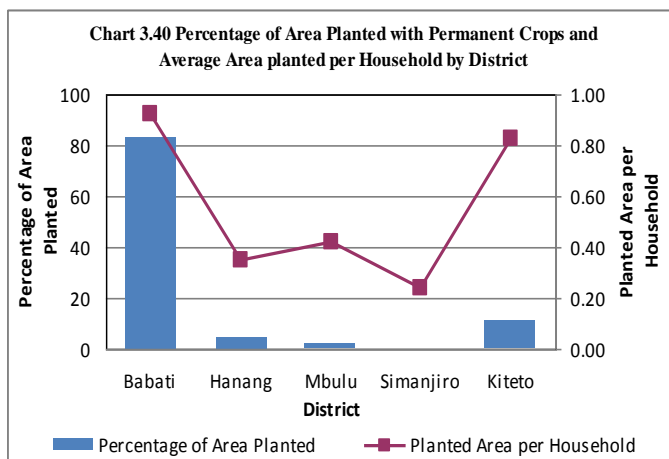
The most important permanent crop in Manyara region was pigeon peas which had a planted area of 38,407 ha, (96.2% of the total planted area of permanent crops in the region), followed by bananas (281 ha, 1%). Each of the remaining permanent crops had an area of less than one percent of the total area planted with permanent crops, (Chart 3.38).

Babati district had the largest area under smallholder permanent crops (33,122 ha, 83% of the total permanent crops planted area in the region), followed by Kiteto (4,181ha, 10%), Hanang (1,731ha, 4%), Mbulu (848ha, 2%) and Simanjiro (61ha, 0%). However, Babati had the largest area per permanent crop growing household (0.9 ha/hh), followed by Kiteto (0.8 ha/hh), and Hanang (0.3ha/hh). Mbulu had the smallest planted area per household 0.2 ha/hh. (Chart 3.39).



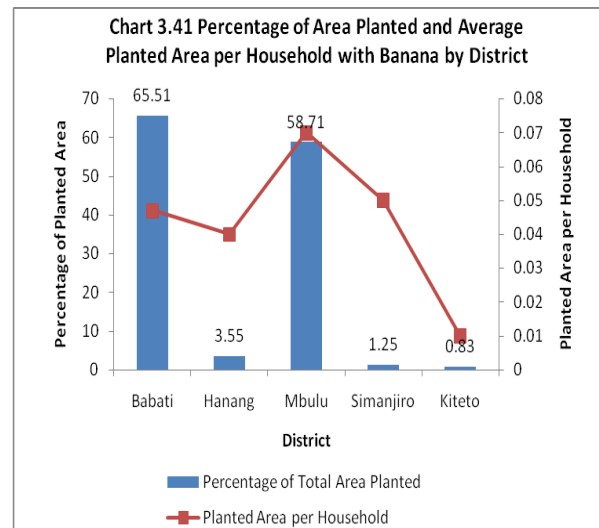
3.4.1 Pigeon Pea

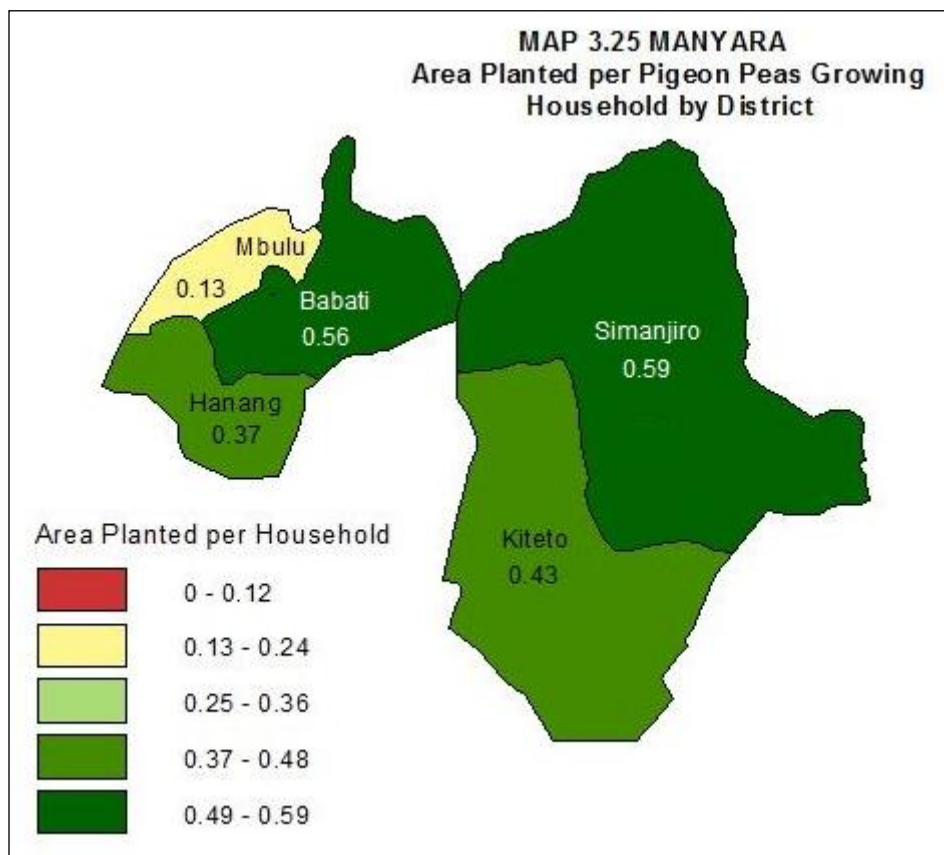
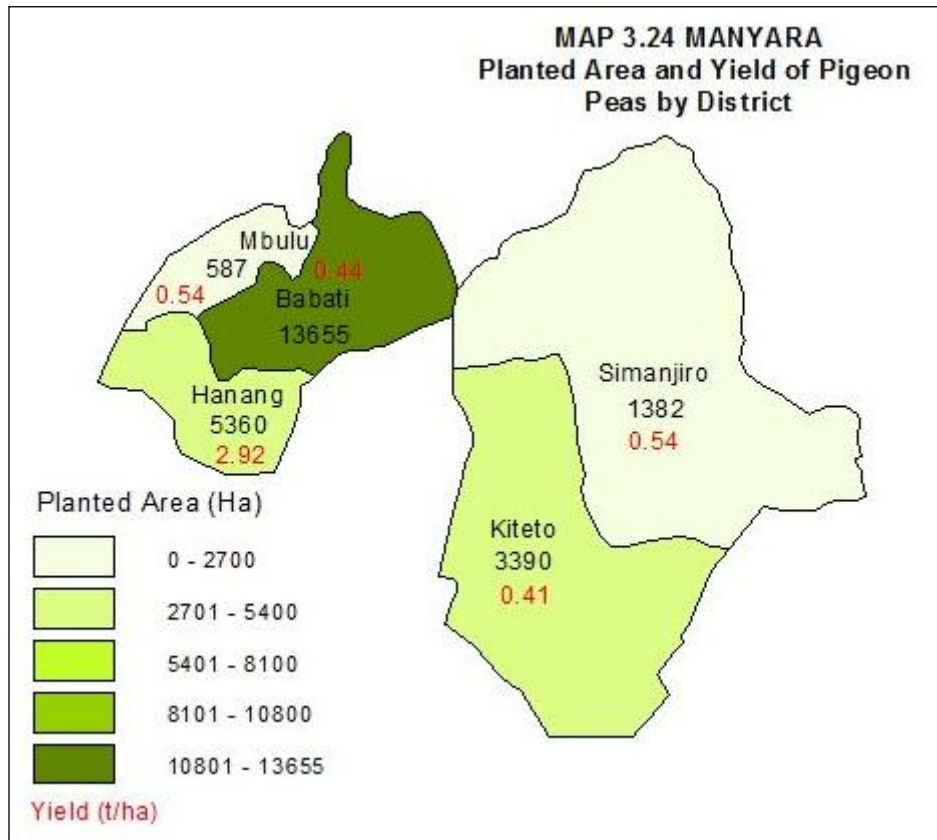
The total production of pigeon peas by smallholders was 18,296 tonnes. In terms of area planted, pigeon pea was the most important permanent crop planted in an area of 38,407 hectares. The crop was grown by 46,171 households in the region. The average area planted with pigeon peas per household was around 0.5 ha per pigeon peas growing household and the average yield obtained by smallholders was 0.5 t/ha from a harvested area of 23,374 hectares. Babati had the largest planted area of pigeon peas in the region (31,893 ha, 83%) followed by Kiteto (4,123ha, 11%), Hanang (1,723ha, 4%), Mbulu (655 ha, 2%) and Simanjiro (13 ha, 0%) However, the average area planted with pigeon peas per pigeon pea growing household was highest in Simanjiro (0.6ha/hh), followed by Babati (0.6 ha/hh), Kiteto (0.4 ha/hh), Hanang (0.4 ha/hh) and Mbulu (0.1 ha/hh), (Chart 3.40 and Map 3.24).

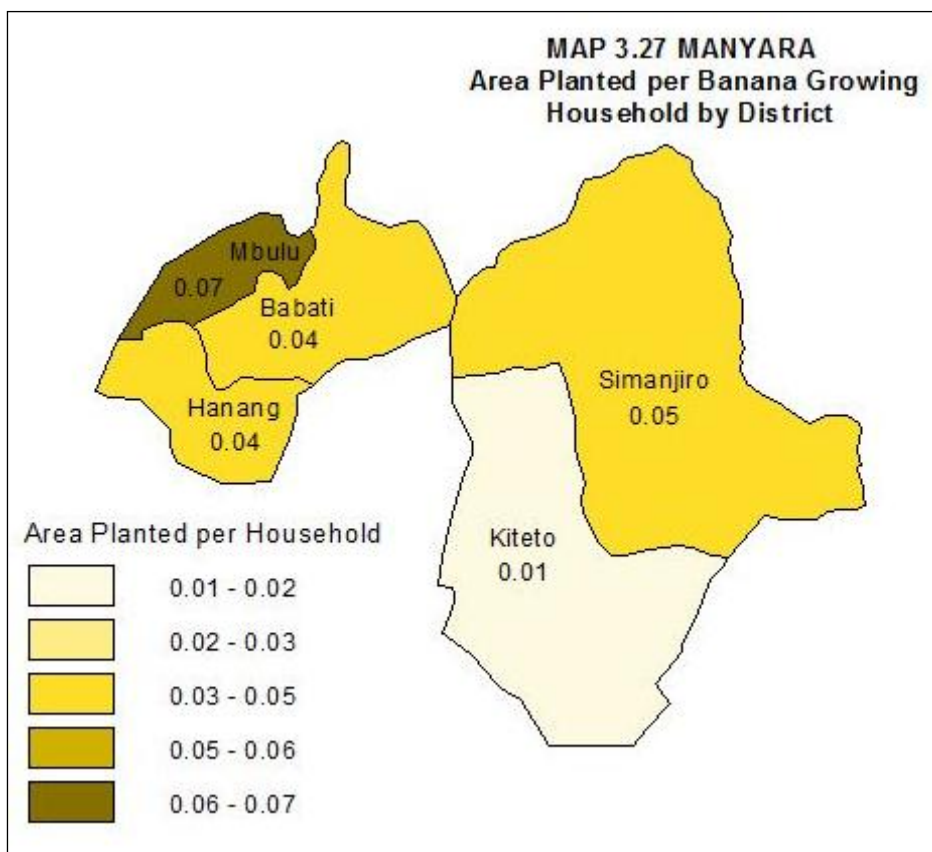
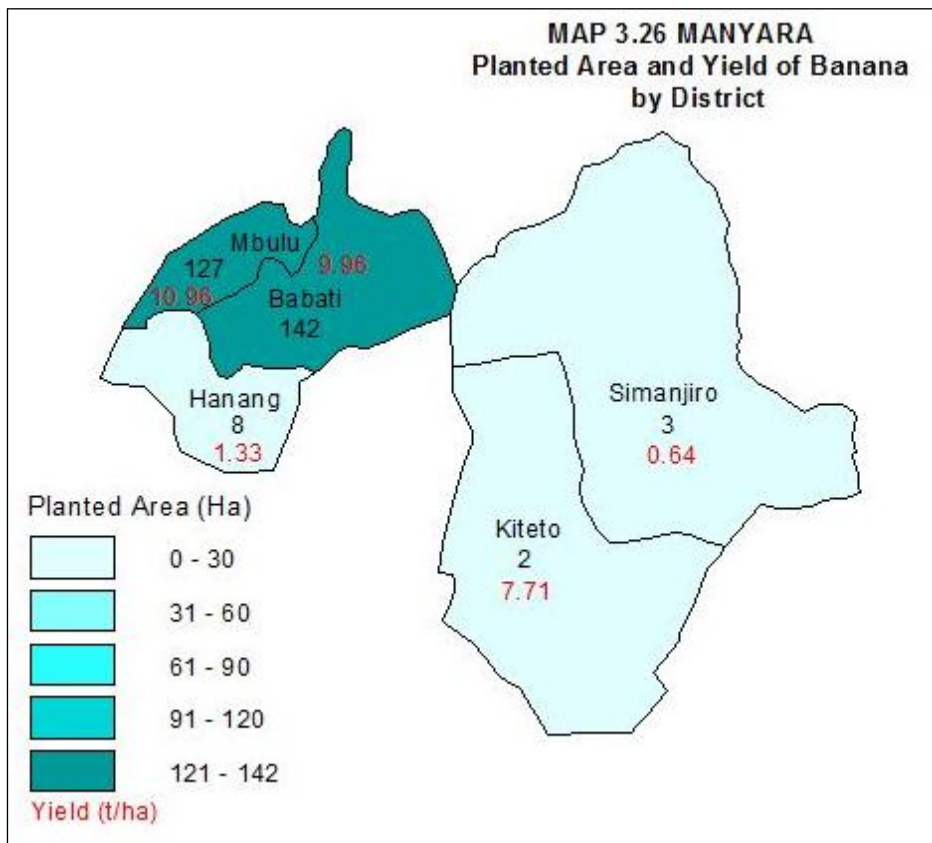


3.4.2 Banana

The total production of bananas by smallholders was 2,826 tonnes. The crop was the second most important permanent crop grown by smallholders in the region. It was grown by 2,619 households (1.3% of the total crop growing households in the region). The average area planted per banana growing household was 0.08 ha and the average yield obtained by smallholders was 10.7 t/ha from the harvested area of 132 hectares. Babati had the largest area of bananas in the region (142 ha, 65.5%) followed by Mbulu (127 ha, 58.7%), Hanang (8 ha, 3.6%), Simanjiro (3 ha, 1.3%) and Kiteto (2 ha, 0.8%), (Map 3.26). However, the average area planted with bananas per banana planting household was highest in Mbulu (0.07 ha/hh), followed by Simanjiro (0.05 ha/hh), Hanang and Babati each with 0.04 ha/hh, and Kiteto (0.01ha/hh), (Chart 3.41 and Map 3.27).







3.5 Input/Implement Use

3.5.1 Methods of Land Clearing

Land clearing is a common pre-tillage operation practiced by most farmers in the region. Land clearing is divided into two categories: bush clearing, which by definition, implies either expansion into virgin areas or into areas which have been left fallow for a long period. The other categories, which include burning, hand

slashing or tractor slashing, is normally an annual clearing exercise to remove vegetation growth from the previous season. Hand hoe was the most widespread method used for land clearing.

The number of households using hand hoe in land clearing in the region during the long rainy season was 192,632 households, representing 97 percent of the total agricultural households followed by sword (187,552hh, 94.5%). Other methods were not used for land clearing; but they are included here as types of agricultural equipment or assets used by agricultural households. These include, in their order of importance, ox plough (67,589 hh, 34%), hand sprayer (31,052 hh, 15.6%), ox planter (2,794 hh, 1.4%), and Grater, Chipper, Oil Press and Oil Mill 1,959 hh, 1%), (Chart 3.42 and Table 3.8).

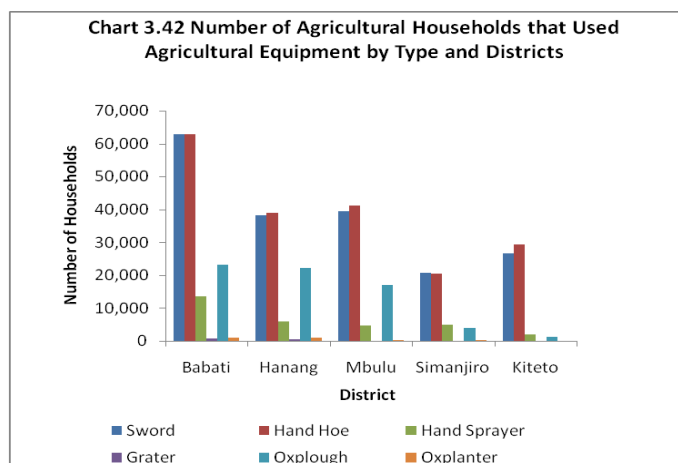


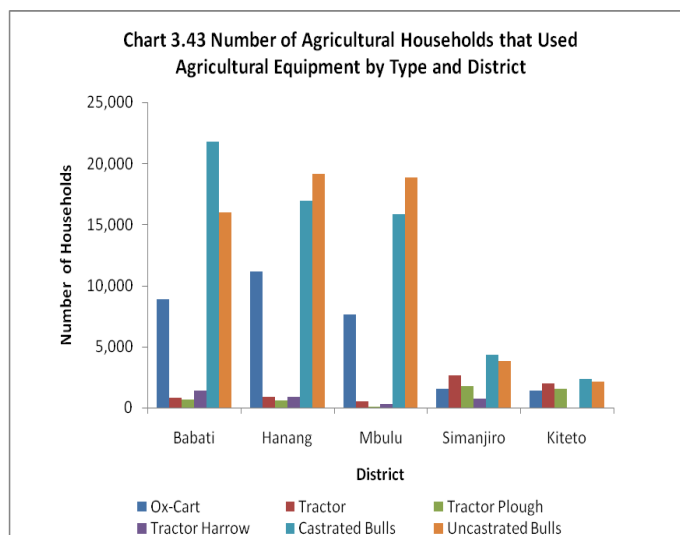
Table 3.8: Number and Percentage of Agricultural Households that used Agricultural Equipment/Asset by type and District

District	Equipment/Asset Name												Total number of Agricultural Households
	Sword		Hand Hoe		Hand Sprayer		Grater, Chipper, Oil Press and Oil Mill		Ox plough		Ox planter		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	62,868	17.5	62,868	17.5	13,585	3.8	790	0.2	23,220	6.5	948	0.3	358,969
Hanang	38,129	18.5	38,909	18.9	5,948	2.9	585	0.3	22,136	10.8	1,073	0.5	205,547
Mbulu	39,407	16.2	41,062	16.9	4,654	1.9	207	0.1	17,066	7.0	414	0.2	242,708
Simanjiro	20,605	6.2	20,491	6.2	4,852	1.5	228	0.1	3,824	1.2	285	0.1	330,779
Kiteto	26,543	8.9	29,301	9.8	2,013	0.7	149	0.0	1,342	0.4	75	0.0	298,421
Total	187,552	94.5	192,632	97.0	31,052	15.6	1,959	1.0	67,589	34.0	2,794	1.4	198,513

3.5.2 Methods of Soil Preparation

Castrated bulls was a mostly used method for soil preparation as it was used by 61,241 households which represents 30.8 percent of the total agricultural households followed by uncastrated bulls (59,878 hh, 30.2%) and ox cart (30,574 hh, 15.4%). Agricultural activities in Manyara region was mainly done during long rainy season.

Babati district had the largest number of households using castrated and uncastrated bulls in land preparation (21,799 hh, 6.1%, and 15,954hh, 4.4% respectively) followed by Hanang (16,968 hh castrated, 8.3%; 19,113 hh, 9.4% uncastrated), Mbulu (15,825 hh, 6.5% castrated; 18,824 hh, 7.8% uncastrated). Simanjiro and Kiteto had minor number of households using these methods in land

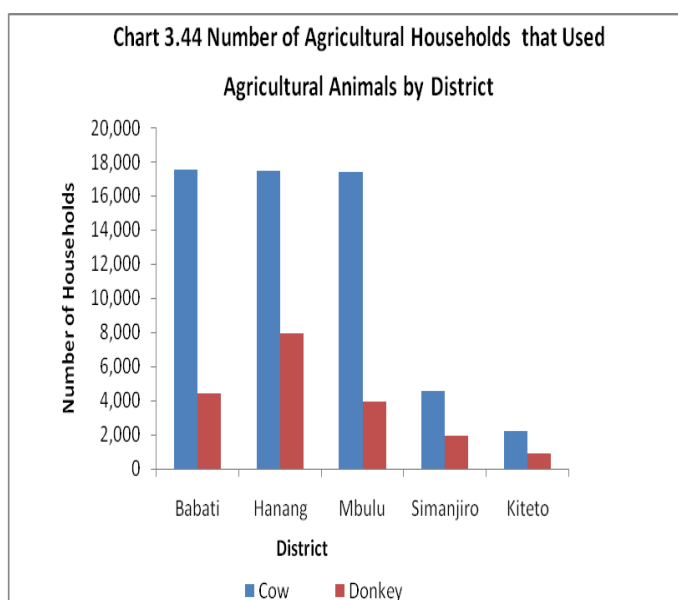


preparation accounting for less than five percent. The majority of agricultural households in Hanang district cultivated using the ox cart (11,117 hh, 5.4% of agricultural households in the district). Tractor was widely used in Simanjiro and Kiteto by 0.8 and 0.7 percents respectively. These two districts were also famous for tractor plough used by about 0.5 percent of the agricultural households in each district. Tractor Harrow was widely used in Babati and Hanang each with about 0.4 percent of the agricultural households, (Chart 3.43, Table 3.9).

Table 3.9: Number and Percentage of Households that Used Agricultural Equipment by Type and District

District	Equipment/Asset Name												Total number of Agricultural Households
	Ox cart		Tractor		Tractor plough		Tractor Harrow		Castrated bulls		Uncastrated bulls		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	8,846	2.5	790	0.2	632	0.2	1,422	0.4	21,799	6.1	15,954	4.4	358,969
Hanang	11,117	5.4	878	0.4	585	0.3	878	0.4	16,968	8.3	19,113	9.3	205,547
Mbulu	7,654	3.2	517	0.2	103	0.0	310	0.1	15,825	6.5	18,824	7.8	242,708
Simanjiro	1,541	0.5	2,626	0.8	1,769	0.5	742	0.2	4,338	1.3	3,824	1.2	330,779
Kiteto	1,417	0.5	2,013	0.7	1,566	0.5	0	0.0	2,311	0.8	2,162	0.7	298,421
Total	30,574	15.4	6,823	3.4	4,656	2.3	3,352	1.7	61,241	30.8	59,878	30.2	198,513

For the most important methods of soil preparation using agricultural animals/equipment, Babati, Mbulu, and Hanang, had the highest percentages of agricultural households (4.9%, 7.2%, and 8.5% respectively) using cow to prepare soil. Donkeys were widely used in Hanang, (3.8%), Mbulu (1.6%), and Babati (1.2%). Thrasher was most common in Kiteto (0.3%) followed by Hanang (0.2%) and Babati and Simanjiro each with 0.1 percent. Thrasher was not reported in Simanjiro.



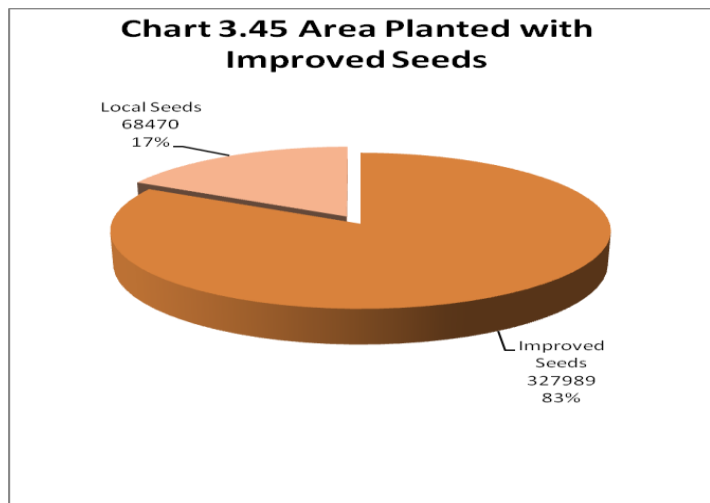
Power tiller was common in Hanang (0.1%); however, the equipment was not reported in the remaining districts. Ox ridger was also used in Babati (0.2%) and Hanang (0.1%), but not used in the remaining districts, (Table 3.10, Chart 3.44).

Table 3.10: Number and Percentage of Households that Used Agricultural Equipment by Type and District

District	Equipment/Asset Name										Total number of Agricultural Households
	Cow		Donkey		Thrasher		Power tiller		Ox Ridger		
	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	17,534	4.9	4,423	1.2	474	0.1	158	0.0	790	0.2	358,969
Hanang	17,455	8.5	7,899	3.8	390	0.2	195	0.1	195	0.1	205,547
Mbulu	17,376	7.2	3,930	1.6	103	0.0	103	0.0	103	0.0	242,708
Simanjiro	4,566	1.4	1,941	0.6	171	0.1	0	0.0	57	0.0	330,779
Kiteto	2,237	0.7	895	0.3	1,044	0.3	0	0.0	0	0.0	298,421
Total	59,225	29.8	19,087	9.6	2,182	1.1	514	0.3	1,145	0.6	198,513

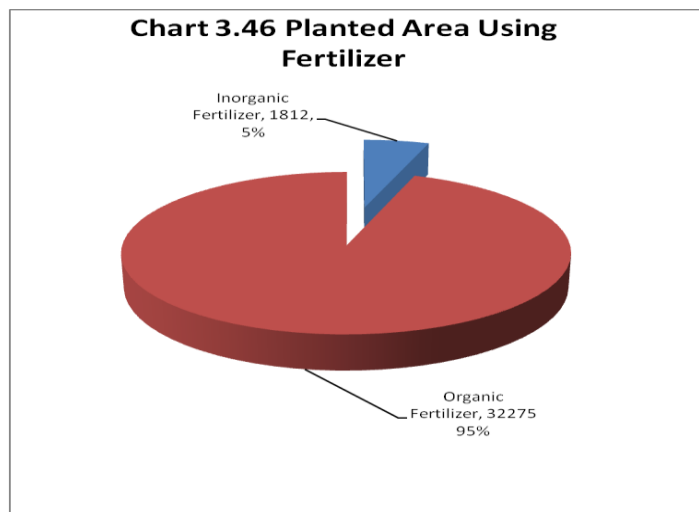
3.5.3 Improved Seed Use

The planted area using improved seeds was estimated at 88,470 ha which represents 22 percent of the total area planted with the annual crops and vegetables. The percentage usage of improved seeds in the short rainy season was higher at 35 percent than the corresponding percentage for the long rainy season (17%), (Chart 3.45, Map 3.32).



3.5.4 Fertilizer Use

The use of fertilizers on annual crops in Manyara region was very small with the application of fertilizers to a planted area of only 34,088 ha (8.1% of the total area planted with annual crops in the region). The planted area without fertilizer for annual crops was 385,414.4 hectares representing 91.9 percent of the total planted area with annual crops. Of the planted area with fertilizer application, organic fertilizer was applied to 32,275 ha which represented 95 percent of the total planted area and Inorganic fertilizer was applied to 1,812 ha which represent 5 percent of the total planted area, (Table 3.10 and Chart 3.46).



The highest percentage of the area planted with fertilizer (all types) was in Babati district (36% of the total planted area with fertilizer in the region) followed by Simanjiro (22%), Kiteto (16%), Mbulu (15%) and Hanang (11%), (Table 3.11 and Chart 3.47).

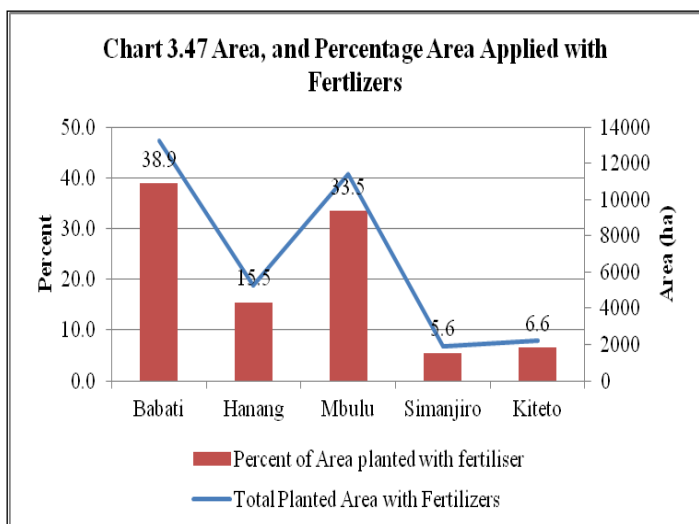


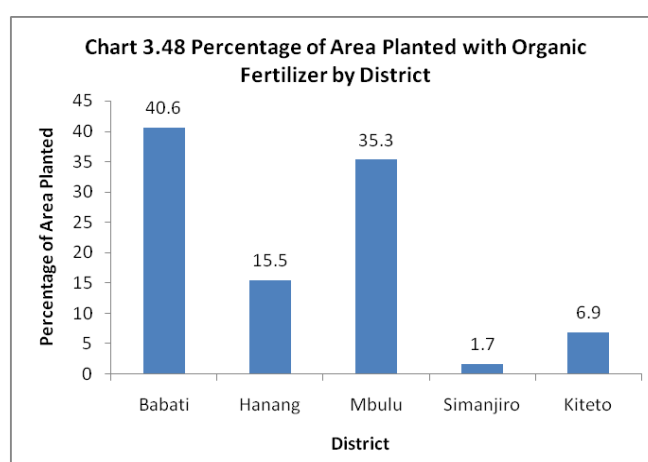
Table 3.11: Planted Area with Fertilizer by District

District	Planted Area Applied with Organic Fertilizer in Vuli	Planted Area Applied with Organic Fertilizer in Masika	Planted Area Applied with Inorganic Fertilizer in Vuli	Planted Area Applied with Inorganic Fertilizer in Masika	Planted Area Applied with Organic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Total Planted Area with Fertilizer	Percent of Area Planted with Fertiliser
Babati	3,657	9,451	64	80	13,108	144	13,252	38.9
Hanang	0	5,009	0	266	5,009	266	5,276	15.5
Mbulu	827	10,560	0	42	11,387	42	11,429	33.5
Simanjiro	92	442	437	923	534	1,360	1,894	5.6
Kiteto	0	2,237	0	0	2,237	0	2,237	6.6
Total	4,577	27,699	501	1,312	32,275	1,812	34,088	100.0

3.5.4.1 Organic Fertilizer Use

The total planted area applied with organic fertilizer was 32,275 ha representing 95 percent of the total area planted during that season, (Table 3.11).

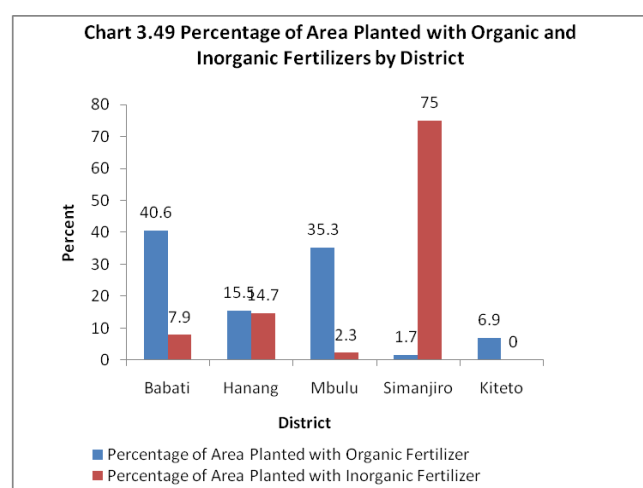
Organic fertilizer was mostly used in Babati (40.6% of the total planted area with fertilizers), Mbulu (35.3%) followed by Hanang (23.5%), Kiteto (7.0%), and Simanjiro (1.7%), (Chart 3.48).

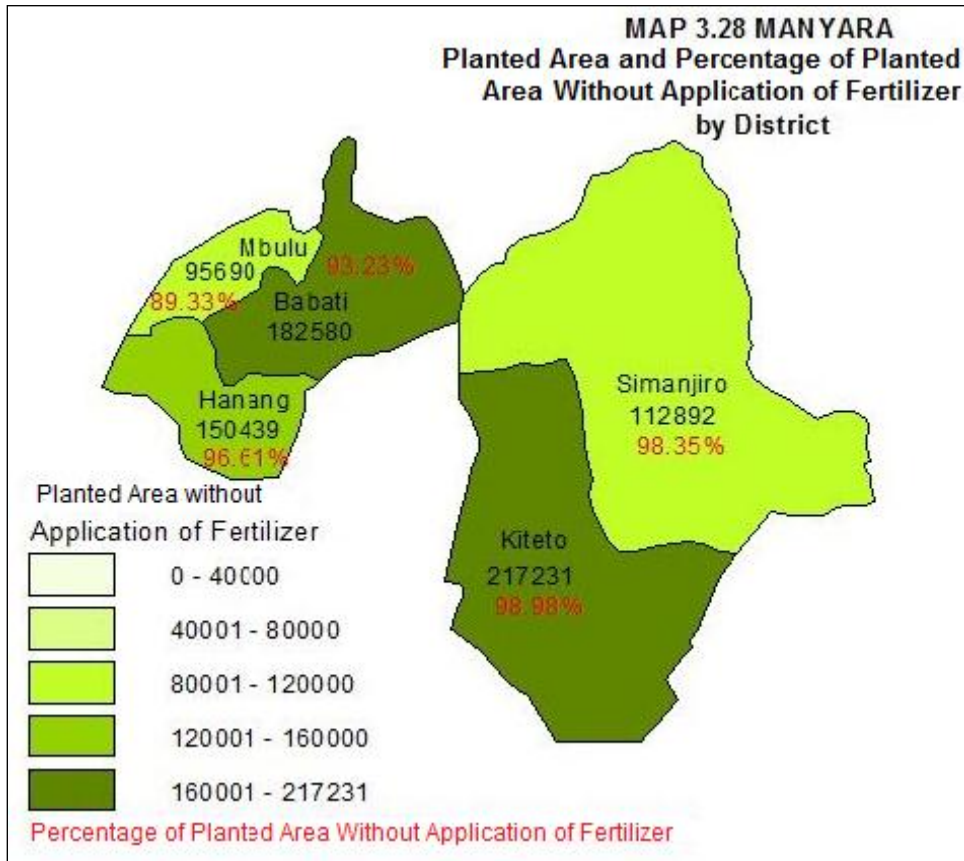


3.5.4.2 Inorganic Fertilizer Use

The total planted area applied with inorganic fertilizers was 1,812 ha which represents 0.4 percent of the total planted area with annuals and 5 percent of the total planted area with fertilizer, (Chart 3.49).

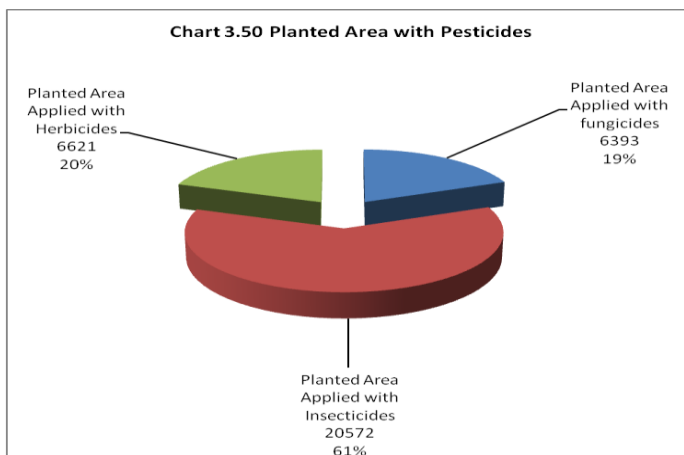
Inorganic fertilizer was mostly used in Simanjiro (75% of the total planted area with inorganic fertilizer), followed by Hanang (14.7%), Babati (7.9%), and Mbulu (2.3%). Kiteto district did not apply inorganic fertilizers, (Chart 3.49).





3.5.5 Pesticides Use

Pesticides are chemicals used for controlling insects, diseases and weeds. This section analyses the use of these chemicals by smallholders on both annual and permanent crops. Pesticides were applied to a planted area of 33,586 ha (7% of the total planted area with annual crops and vegetables). Insecticides were the most common pesticides used in the region (61% of the total area applied with pesticides) followed by fungicides (20%) and herbicides (19%), (Chart 3.50).

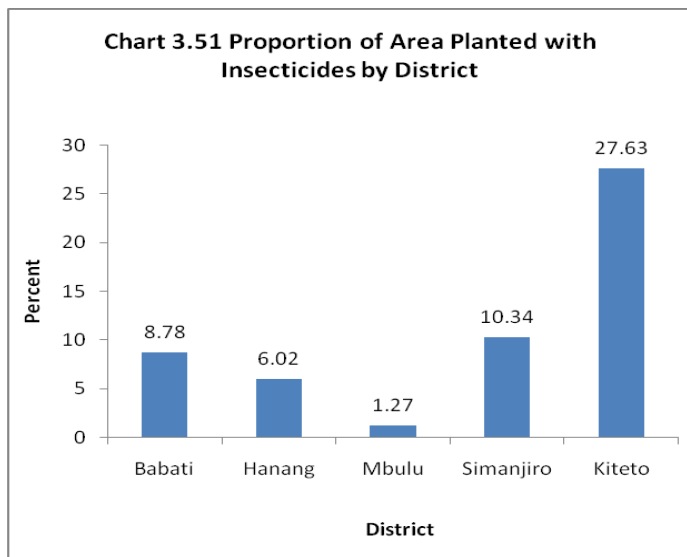


Insecticides were the most common pesticides used in the region (61% of the total area applied with pesticides) followed by fungicides (20%) and herbicides (19%), (Chart 3.50).

3.5.5.1 Insecticide Use

The planted area applied with insecticides was 20,572 ha which represents 4.3 percent of the total planted area for annual crops and vegetables.

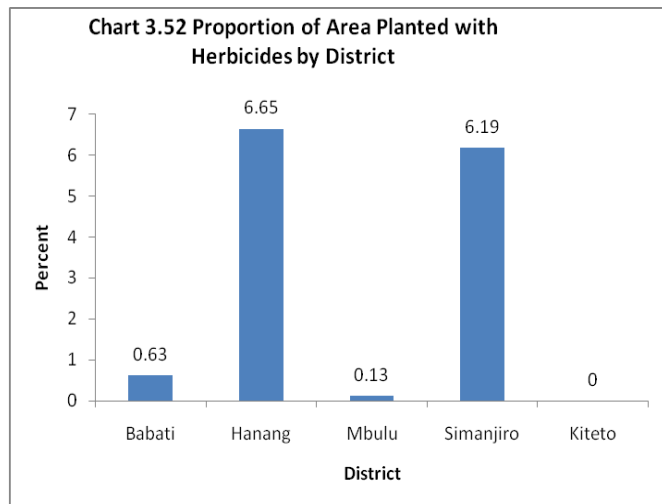
Kiteto had the highest percentage of the planted area with insecticides (27.6% of the total planted area with pesticides in the region). Simanjiro had the second highest percentage of area applied with insecticides (10.3%), followed by Babati (8.8%), Hanang 6% and Mbulu with very little application of insecticides at 1.3 percent, (Chart 3.51).



Hanang 6% and Mbulu with very little application of insecticides at 1.3 percent, (Chart 3.51).

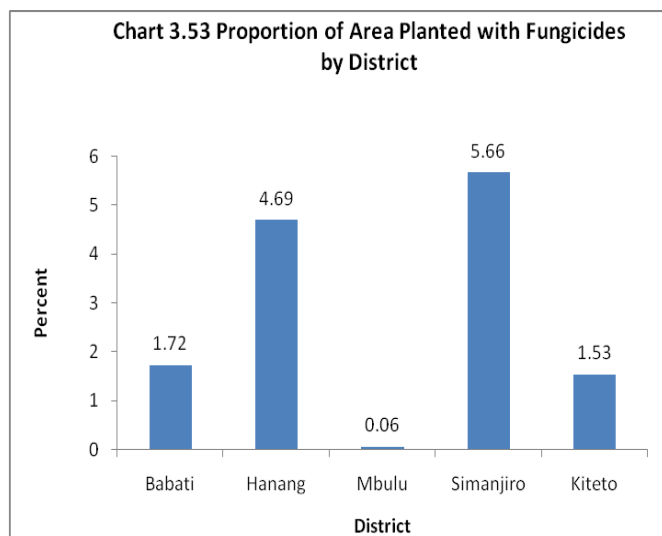
3.5.5.2 Herbicide Use

The planted area applied with herbicides was 6,621 ha representing 20 percent of the total planted area applied with pesticides in the region. Herbicides were applied in Hanang and Simanjiro districts at 6.7 percent and 6.2 percent respectively. The application of herbicides was insignificant in the remaining districts, (Chart 3.52).



3.5.5.3 Fungicide Use

The planted area applied with fungicides was 6,393 ha which represented 19 percent of the total planted area planted with pesticides in the region. Simanjiro had the highest percentage of the planted area with fungicides (5.7% of the total area planted with pesticides in the region) followed by Hanang (4.7%), Babati (1.7%), and Kiteto (1.5 %). The application of herbicides was insignificant in Mbulu district, (Chart 3.53).



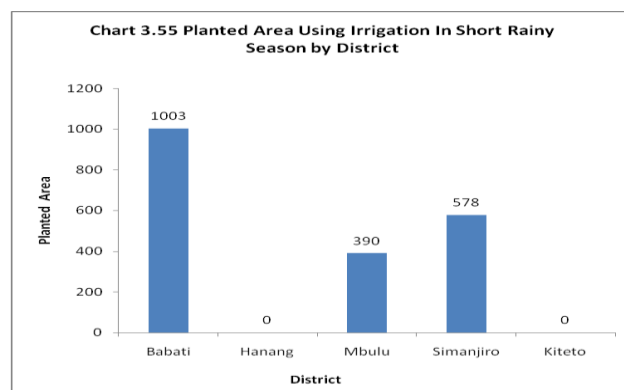
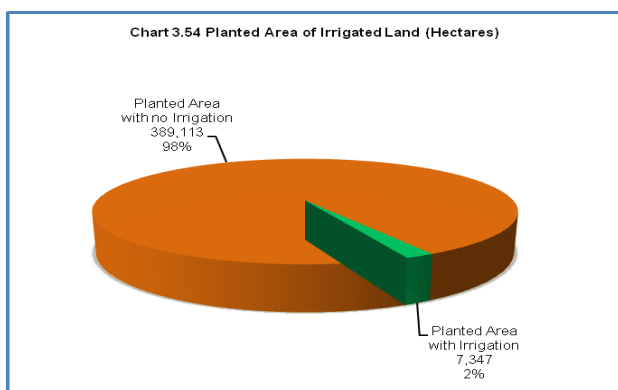
3.6 Irrigation

Water is the limiting factor to crop production in many areas in Tanzania and without water, most other agricultural practices applied to crops do not result in a significant increase in yields. This section deals with the area under irrigation by different crops and the means by which water was extracted from the source and applied to the field.

3.6.1 Planted Area with Annual Crops and Under Irrigation

The planted area with irrigation in Manyara region appears to have increased slightly over the period of 5 years from 6,736 hectares in 2002/03 to 7,347 hectares in 2007/08.

The area of annual crops under irrigation was 7,347 ha representing 2 percent of the total area under irrigation in the region, (Chart 3.54). The area under irrigation during the short rainy season was 1,971 ha accounting for 17.6 percent of the total area under irrigation.



The district with the largest planted area under irrigation with annual crops was Babati (2,573 ha, 35% of the total irrigated area with annual crops during the long rainy season) followed by Mbulu (1,813 ha, 24.7%), Simanjiro (1,663ha, 22.6%), Hanang (1,298ha, 17.7%) and Mbulu (1,103 ha, 16.4%). When expressed as a percentage of the total area planted in each district, Mbulu had the highest percentage (3.4%) of the planted area in the district under irrigation followed by Simanjiro (2.9%), Babati (2.6%), and Hanang (1.7%). However, irrigation was not applied in Hanang and Kiteto districts in seasons, (Table 3.12, and Table 3.13, Chart 3.56, and Map 3.29).

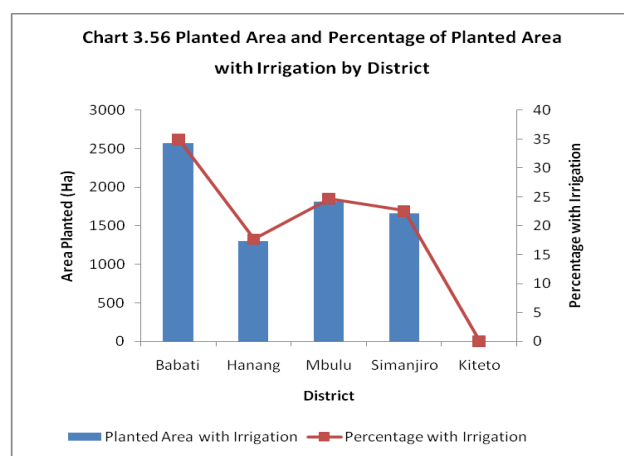


Table 3.12: Area, Percentage and Proportion Area under Irrigation by District

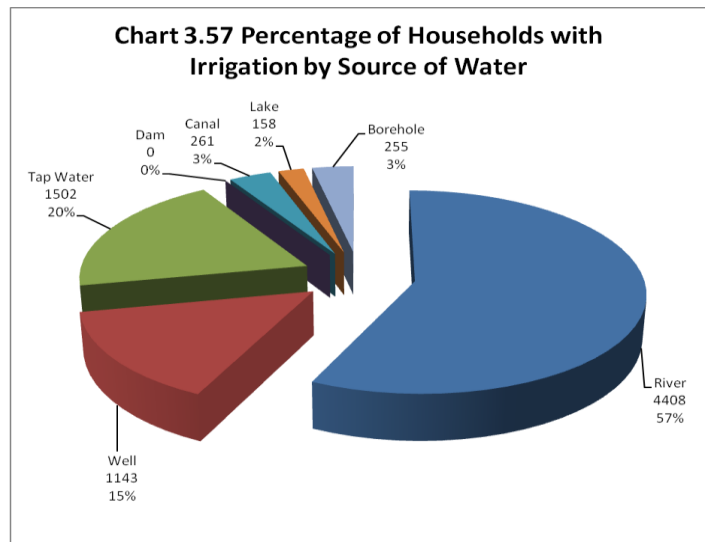
District	Planted Area with Irrigation	Percentage of Planted Area under Irrigation	Total Planted Area (ha)	Proportion percent of Area under Irrigation
Babati	2,573	35	97,916	2.6
Hanang	1,298	17.7	77,857	1.7
Mbulu	1,813	24.7	53,559	3.4
Simanjiro	1,663	22.6	57,393	2.9
Kiteto	.	0	109,734	
Total	7,347	100	396,459	1.9

Table 3.13: Planted Area with Annual Crops and Under Irrigation by Season

District	Shot Rainy Season			Lon Rainy Season		
	Planted Area with Irrigation	Total Planted Area (ha)	Percentage of Planted Area under Irrigation	Planted Area with Irrigation	Total Planted Area (ha)	Percentage of Planted Area under Irrigation
Babati	1,003	5,605	17.90	1,570	92,311	1.70
Hanang	.	1,717	0.00	1,298	76,140	1.70
Mbulu	390	2,628	14.84	1,423	50,932	2.79
Simanjiro	578	1,225	47.17	1,085	56,168	1.93
Kiteto	.	.	0.00	.	109,734	0.00
Total	1,971	11,175	17.64	5,375	385,285	1.40

3.6.2 Sources of Water Used for Irrigation

The main source of water used for irrigation was the river (57% of households with irrigation) followed by tap water (20%), wells (15%), and canals and bore holes each with 3 percent. The remaining sources such as lakes and dams were of minor importance each accounting for less than 3 percent of the households with irrigation. The highest percentages of households that obtained their irrigation water from rivers



were in Babati and Simanjiro districts (57.3% and 31.1% respectively). Bore hole was the main source of irrigation water in Babati and Hanang by 62 percent and 38 percent respectively. While lake was the source of irrigation in Babati district only, canals were also in Babati (60%) and Mbulu (40%). Tap water was widely used in Babati (63%), Simanjiro (30%) and Hanang (6%), and wells were used only in Babati (83%) and Hanang (17%), (Table 3.14, Chart 3.57).

Table 3.14: Number and Percentage of Households with Irrigation and Source of Water by District

District	Main Source of Irrigation Water												
	River	%	Borehole	%	Lake		Canal	%	Tap Water		Well		Total
Babati	2,527	57.3	158	62	158	100	158	60	948	63	948	83	4,897
Hanang	98	2.2	98	38	0	0	0	0	98	6	195	17	488
Mbulu	414	9.4	0	0	0	0	103	40	0	0	0	0	517
Simanjiro	1,370	31.1	0	0	0	0	0	0	457	30	0	0	1,827
Kiteto	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Total	4,408	100.0	255	100	158	100	261	100	1,502	100	1,143	100	7,728

3.6.3 Methods of Obtaining Water for Irrigation

Gravity was the most common means of obtaining water for irrigation with 81.4 percent of the households using this method followed by hand bucket (13.8%) and motor pump (4.8%). The percentage of households by method of drawing water in Babati was; gravity (56.5%), hand bucket (82.6%) and hand pump (76.4%). Few agricultural households in Simanjiro (32.6%) used gravity. Hand bucket and hand pump were used by 11.3 percent and 23.6 percent of the agricultural households in Hanang district, (Table 3.15).

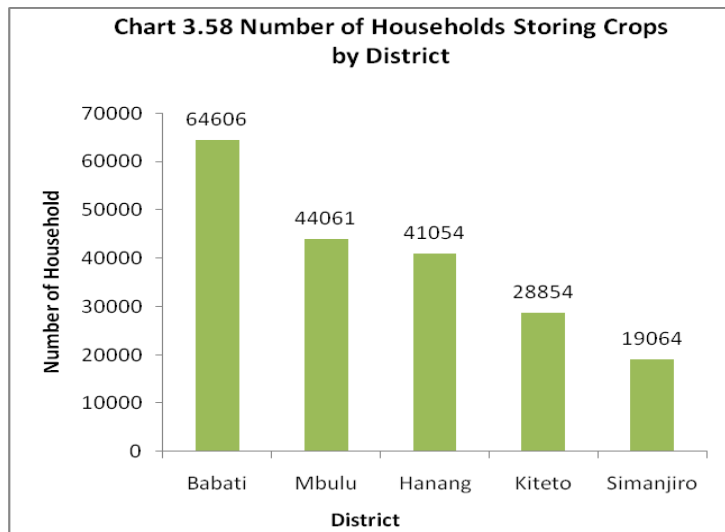
Table 3.15: Number and Percentage of Households with Irrigation by Method of Obtaining Water by District

District	Gravity	%	Hand bucket	%	Hand pump	%	motor pump	Other	Total
Babati	3,159	56.5	1,422	82.6	316	76.4	0	0	4,897
Hanang	195	3.5	195	11.3	98	23.6	0	0	488
Mbulu	414	7.4	103	6.0	0	0.0	0	0	517
Simanjiro	1,827	32.6	0	0.0	0	0.0	0	0	1,827
Kiteto	0	0.0	0	0.0	0	0.0	0	0	0
Total	5,594	100.0	1,720	100.0	413	100.0	0	0	7,728

3.7 Crop Storage, Processing and Marketing

3.7.1 Crop Storage

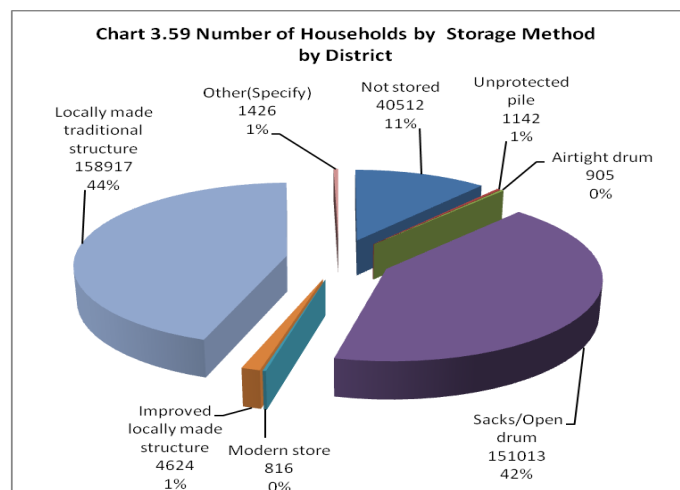
Crop storage means keeping a crop for a certain period of time as food for the household, in order to sell at higher prices or as seed for planting in the following season. The results for Manyara region show that there were 197,640 crop growing households (98% of the total crop growing households) that stored various agricultural products in the region.



Babati district had the highest number of households which stored crops in the region (64,606 hh, 32.7 % of households reported to store crops in the region) followed by Mbulu (44,061 hh, 22.3%), Hanang (41,054hh, 20.8%) Kiteto (28,854 hh, 14.6%) and Simanjiro (19,064 hh, 9.6%) (Chart 3.58).

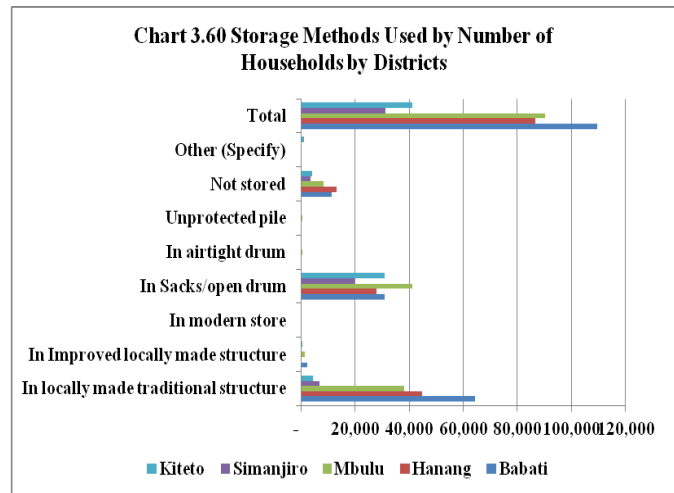
3.7.1.1 Methods of Storage

Most of the crop growing households in the region stored their produce in locally made traditional structures (158,742 households, 44% of households that stored crops in the region) followed by sacks and/or open drums (150,843hh, 42%), improved locally made structures (4,619 hh, 1%), and unprotected pile (1,141 hh, 1%). Other methods such as airtight drums and modern store were minor, each representing less than one percent of the households that reported storing crops in the region.



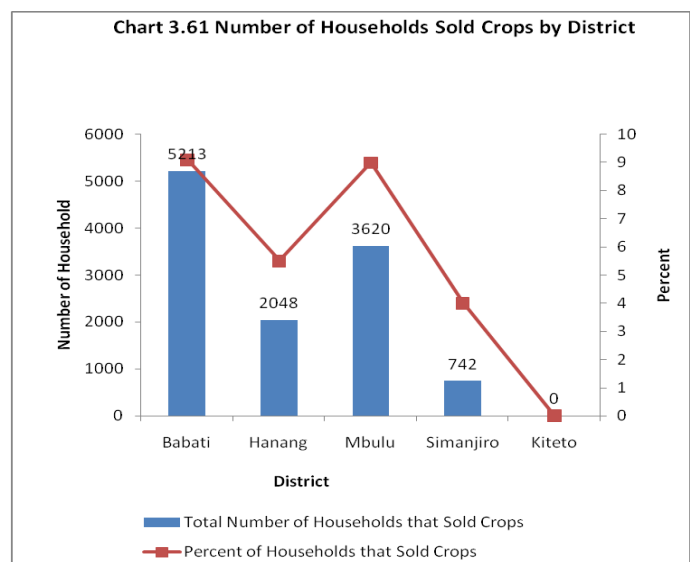
However, 11 percent of the crops growing households reported not using any method of storing crops in the region, (Chart 3.59).

The highest percentage of households using locally made traditional structure was in Babati (59%) and Hanang (51%) of the total number of households storing crops. Most crop storing households in Kiteto (75%), Simanjiro (64%), and Mbulu (46%) used sacks/open drum in storing crops, (Chart 3.60).



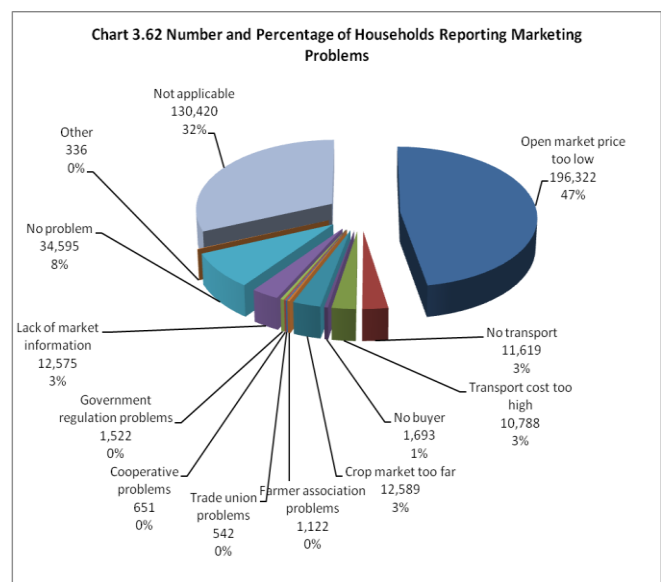
3.7.2 Crop Marketing

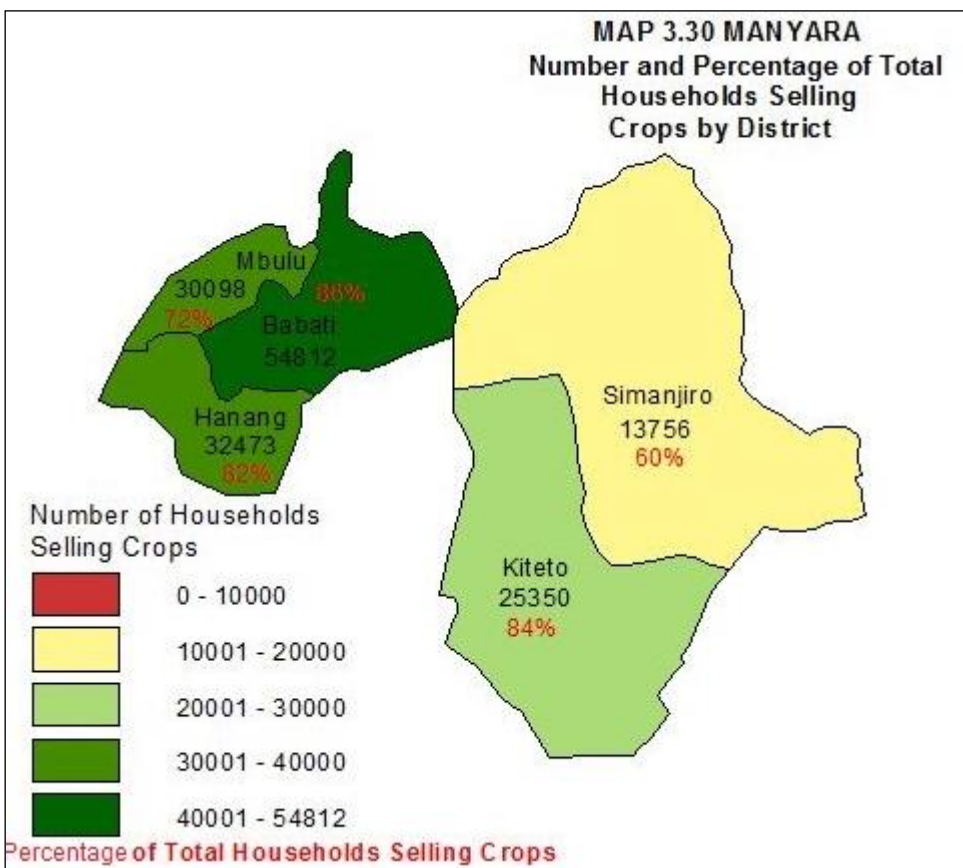
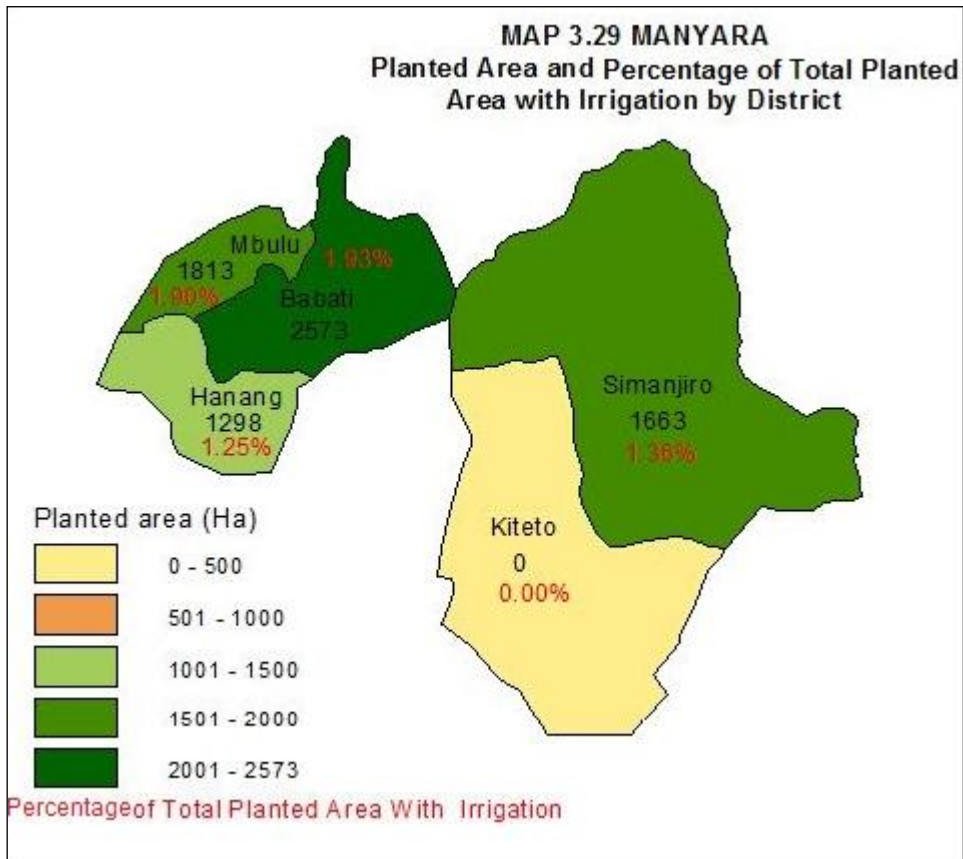
The number of households that reported selling crops was 11,623 which represent 6.2 percent of the total number of crop growing households. The percentage of crop growing households selling crops was highest in Babati (5,213 hh, 8.9%) and Mbulu (3,620 hh, 8.9%) 3,620 followed by Hanang (5.2%) and Simanjiro (4%). There was not a single household which reported to have sold crops in Kiteto district, (Chart 3.61 and Map 3.30).



Main Marketing Problems

Low price for agricultural produce was the main marketing problem reported by 196,322 households (47.3% of crop growing households that reported marketing problems). Apart from low market prices, other problems were longer distances to the markets (3%) and lack of market information (3%) of the crop growing households followed by lack of transport (2.8%) and high transport costs (2.6%). Other marketing problems were minor; each representing less than 1 percent of the total reported problems, (Chart 3.62).





3.8 Access to Crop Production Services

3.8.1 Access to Agricultural Credit

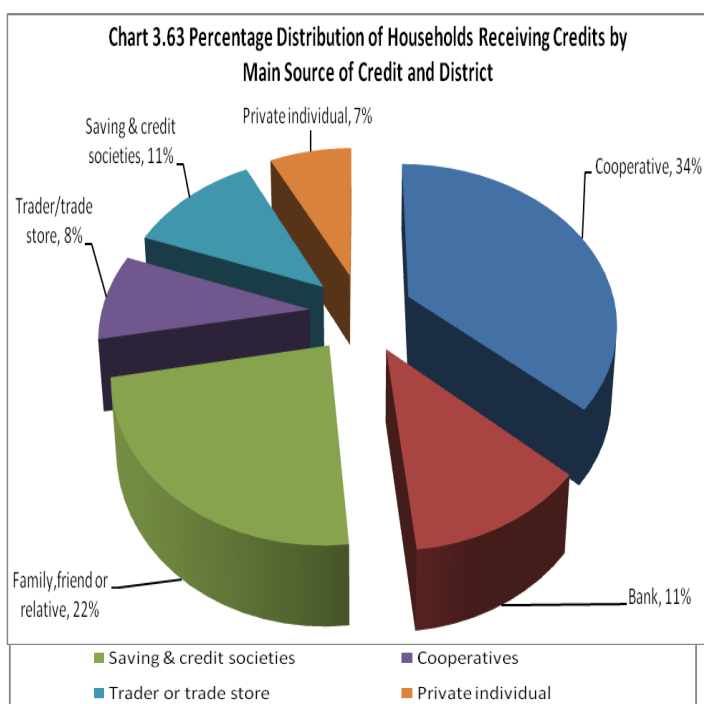
The census result shows that, very few agricultural households (5,551, 2.8%) accessed credit out of which 3,832 (69%) were household male members and 1,719 (31%) were household female members. There were more male members than female members who accessed agricultural credit in all the districts except Kiteto, where there were more female members (69.2%) than agricultural male members (30.8 %). The percentage of agricultural household members who accessed credits was highest for males (87.5%), and lowest for females (12.5%) in Hanang district, (Table 3.16).

Table 3.16: Number and Percentage of Household Members who Received Credits by Sex and District

District	Male		Female		Total	
	Number	%	Number	%	Number	%
Babati	2,369	75.0	790	25.0	3,159	100.0
Hanang	683	87.5	98	12.5	780	100.0
Mbulu	310	75.0	103	25.0	414	100.0
Simanjiro	171	75.0	57	25.0	228	100.0
Kiteto	298	30.8	671	69.2	969	100.0
Total	3,832	69.0	1,719	31.0	5,551	100.0

3.8.1.1 Source of Agricultural Credits

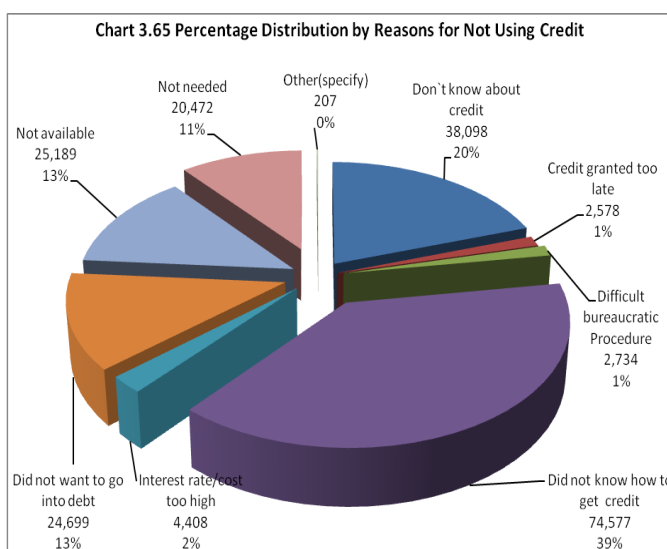
The major agricultural credit provider in Manyara region was cooperative which provided credit to 2,014 agricultural households (34% of the total number of households that accessed credit). The next major sources of agricultural credits were family, friends, and relatives which collectively provided credit to 1,313 agricultural households (22.2% of the total number of households that accessed credit). There were other credit providers



namely; Commercial Banks, Savings and Credit Societies, Trader/Trade Stores, and Private individuals, which all together provided credit to the remaining 2,591 households (43.8% of the total number of households that accessed credit), (Charts 3.63). Babati had the highest percentage of agricultural households which received agricultural credit from the major agricultural credit providers (cooperatives; family, friends and relatives). Cooperatives were in all the districts, but family, friends and relatives were a source of agricultural credit to Babati and Mbulu districts only. Savings and Credit Societies were in all the districts except Mbulu, while Commercial Banks were operative as a source of agricultural credits to Babati and Kiteto districts only, (Chart 3.64).

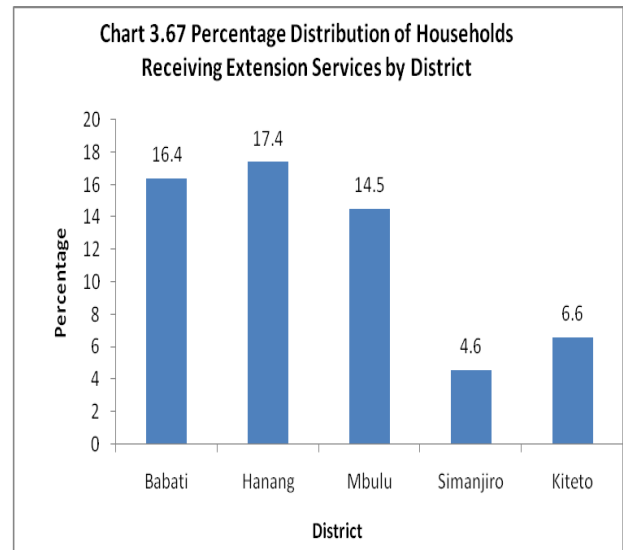
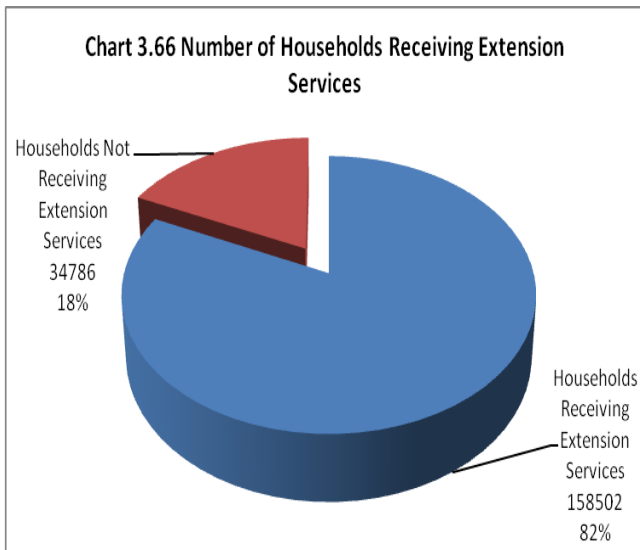
3.8.1.2 Reasons for Not Using Agricultural Credits

The main reason for not using agricultural credits as a source of finance was little awareness, that is, “did not know how to get credit” (39%) and “don’t know about credit” (20%) of the agricultural households followed by households which reported the unavailability of credit and “not wanting to go into debt”, each accounting for 13 percent. The other reason is ‘credit not needed’, reported by 11 percent of the agricultural households. The rest of the reasons collectively accounted for 4 percent of the households which did not use credit, (Chart 3.65).



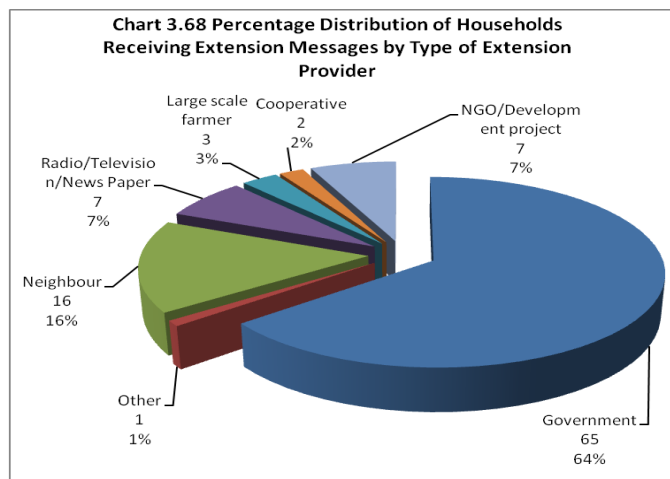
3.8.2 Crop Extension

The number of agricultural households that received crop extension was 158,502 (82% of the total crop growing households in the region), (Chart 3.66). Some districts had more access to extension services than others, with Hanang having a relatively high proportion of households (17.4%) that received crop extension messages in the district, followed by Babati (16.4%), Mbulu (14.5%), Kiteto (6.6%), and Simanjiro (4.6%), (Chart 3.67 and Map 3.31).



Sources of Crop Extension Messages

Of the households which received extension advice, the Government provided the greatest proportion (65%, 154,286 households) followed by neighbours that provided 16 percent, Radio/Television/Newspapers and NGO/Dev Project each provided 7%, Large scale farms (3%) and Cooperatives (2%), (Chart 3.68). There are however district



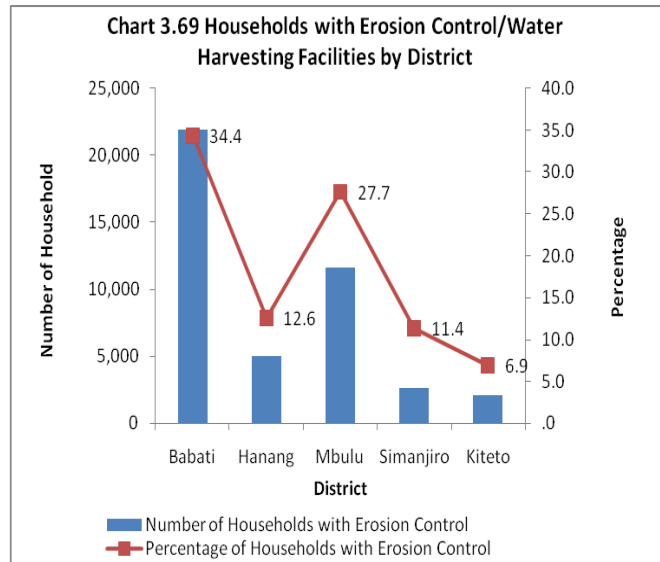
variations with the proportion of the households which received advice from government services ranging from 82 percent in Babati district to 94 percent in Mbulu district.

3.9 Erosion Control Facilities

Erosion control and water harvesting facilities are grouped together as they normally have dual purposes of reducing erosion and increasing the amount of water available for crop production.

The number of agricultural households that had soil erosion and water harvesting facilities on their farms was 43,227 which represent 22 percent of the total number of agricultural households in the region

The percentage of households with soil erosion control and water harvesting facilities was highest in Babati district (34.4%) followed by Mbulu (27.7%), Hanang (12.6%), Simanjiro (11.4%) and Kiteto (6.9%), (Chart 3. 69).



Terraces accounted for 40 percent of the total number of structures, followed by drainage ditches (32%), other (16%), erosion control bunds (6%) gabions/sandbags (4%) vertiver grass (2%) tree belts (0.3%) and water harvesting bunds (0.1%). Terraces and drainage ditches together had 144,963 structures. This represented 72 percent of the total structures in the region. The remaining 28 percentages were shared among the rest of the erosion control methods mentioned above. Babati and Mbulu districts had 139,352 erosion control structures (69 percent of the total erosion structures in the region).(Chart 3.70, Table 3.17).

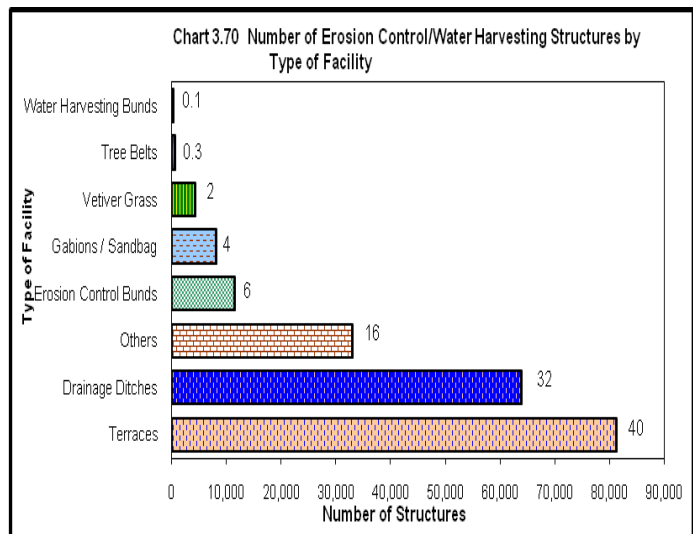
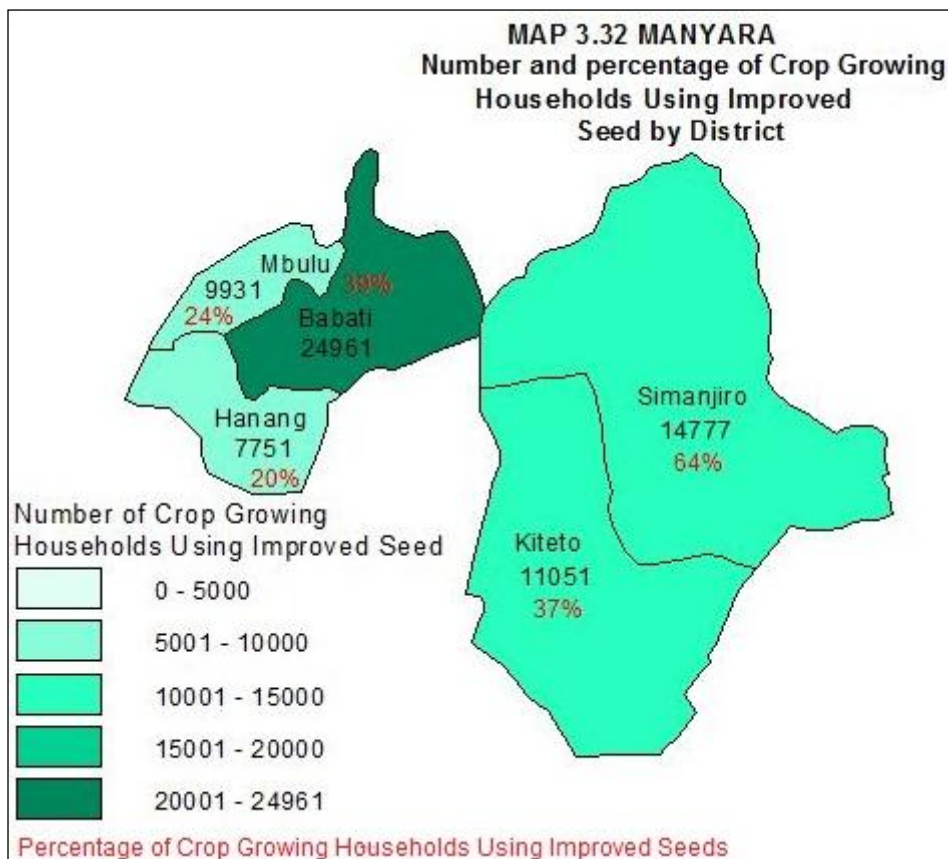
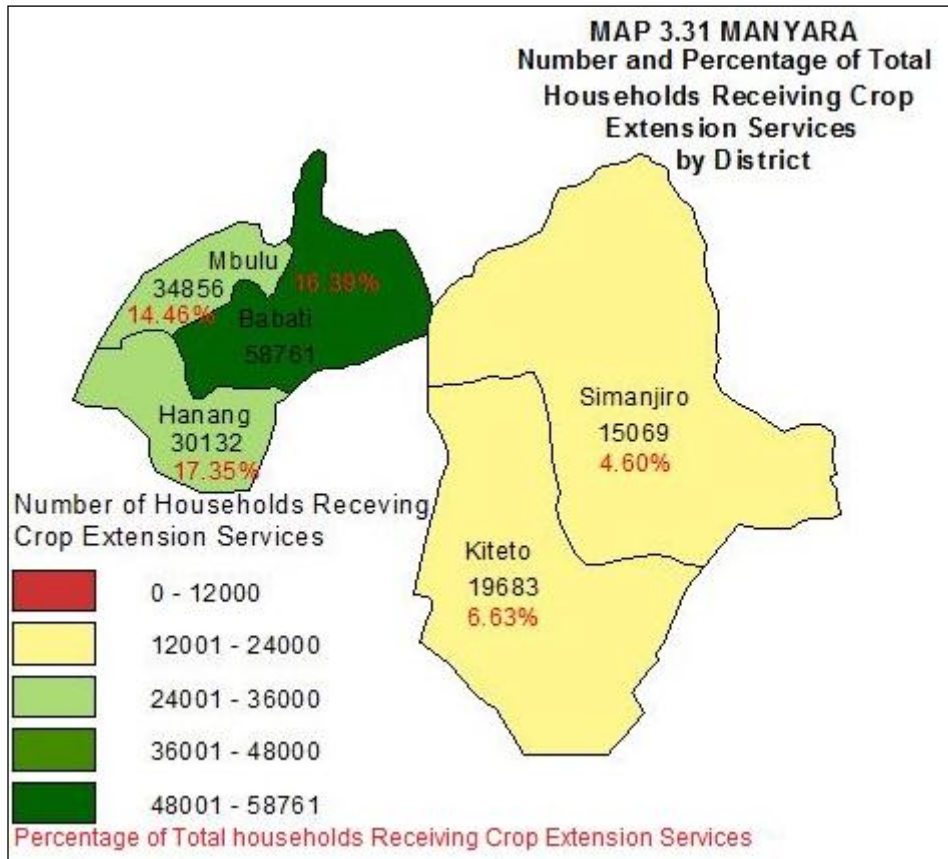


Table 3.17: Number of Erosion Control/Water Harvesting Structures by Type and District as of 2007/08 agricultural Year- Manyara Region

Region	Terraces	Erosion Control Bunds	Gabions /Sandbag	Vetiver Grass	Tree Belts	Water Harvesting Bunds	Drainage Ditches	Others	Total
Babati	37,595	19,745	0	3,317	4,423	3,001	11,847	158	80,086
Hanang	20,576	6,241	0	0	390	1,560	1,658	0	30,425
Mbulu	12,929	19,445	0	827	6,620	2,999	16,445	0	59,266
Simanjiro	7,021	16,267	571	0	0	0	571	0	24,430
Kiteto	3,057	2,088	0	0	0	447	2,460	0	8,052
Total	81,177	63,786	571	4,145	11,433	8,008	32,982	158	202,259



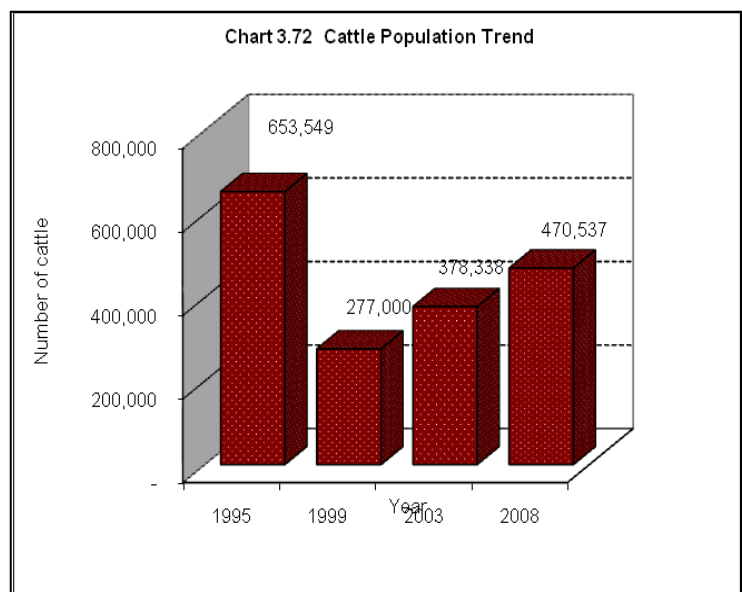
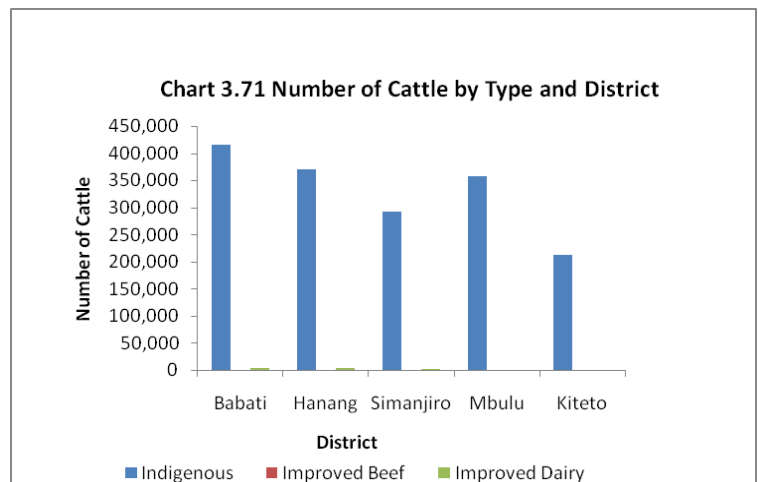
3.10 LIVESTOCK RESULTS

3.10.1 Cattle Production

Cattle were the dominant livestock type in the region, followed by goats, sheep and pigs. The total number of cattle in the region was 1,662,452 equivalent to 7.8 percent of the total cattle population on Tanzania Mainland.

3.10.1.1 Cattle Population

The number of indigenous cattle in Manyara region was 1,648,488 (99% of the total number of cattle in the region), 11,848 (0.1%) were of dairy breeds and 2,115 (0.7%) were of beef breeds. The census results show that 120,249 agricultural households (62.9% of the total agricultural households in the region) kept 1.6 million cattle. This was equivalent to an average of 14 heads of cattle per cattle-keeping-household.



The district with the largest number of cattle was Babati which had about 419,544 cattle or 25.1% of the total cattle in the region followed by Hanang (375,144 cattle, 22.4%), Simanjiro (358,968 cattle, 21.4%), Mbulu (295,708 cattle, 17.7%), and Kiteto (213,088 cattle, 12.7%) (Chart 3.72 and Map 3.34). However, Mbulu district had the highest density (209 heads per sq. km),

Although Babati district had the largest number of cattle in the region, most of them (99%) were indigenous. The number of dairy cattle in the district was relatively small when compared to that of Hanang and that of Mbulu district. The number of beef cattle in Babati district was the second highest after Kiteto district.

3.10.1.2 Herd Size

About 32 percent of the cattle-rearing households had herds of size 1-5 cattle with an average of three cattle per household. Herd size of 6-30 accounted for about 34 percent of all the cattle in the region. Only 5 percent of the cattle rearing households had herd sizes of 31- 100 cattle. About 87 percent of the total cattle rearing households had herds of size 1-30 cattle and owned 59.5 percent of the total cattle in the region, giving an average of 2 cattle per cattle rearing household. There were about 1,088 households each with a herd size of more than 151 cattle (259,922 cattle in total) giving an average of 239 cattle per household.

3.10.1.3 Cattle Population Trend

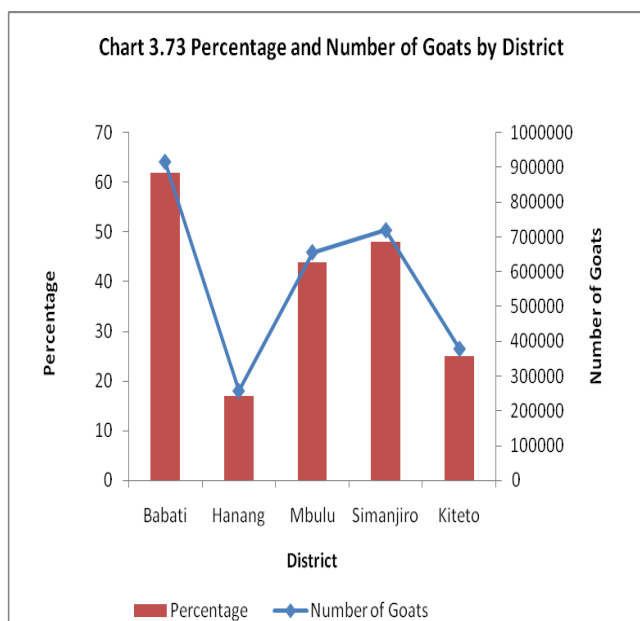
Cattle population in Manyara increased during the period of five years from 1,177,951 in 2002/03 to 1,648,888 cattle in 2008. This trend depicts an overall annual positive growth rate of 690 percent.

3.10.2 Goat Production

Goat rearing was the second most important livestock keeping activity in the region, followed by sheep and pig rearing. In terms of total number of goats on the Mainland, Manyara region ranked third out of the 21 regions with 9.8 percent of the total goats on the Mainland.

3.10.2.1 Goat Population

The number of goat-rearing-households in Manyara region was 109,407 (55% of all the agricultural households in the region) with a total of 1,481,729 goats giving an average of 14 heads per goat-rearing-household. Babati had the largest number of goats (915,356 goats, 62% of all goats in the region), followed by Simanjiro (718,625 goats, 48%), Mbulu (655,511 goats, 44%) Kiteto (377,572 goats, 25%), and Hanang (256,662 goats, 17%), (Chart 3.73 and However, Mbulu district had the highest density (17533 heads per sq.km),



3.10.2.2 Goat Herd Size

About 77 percent of the goat-rearing households had herd size of 1-4 goats with an average of 2 goats per goat rearing household. Slightly more than 95 percent of the total goat-rearing households had herd size of 1-14 goats and owned 67.3 percent of the total goats in the region giving an average of 6 goats per goat-rearing households. The region had 3,275 households (1%) with herd sizes of 40 or more goats each (201,674 goats in total), resulting in an average of 62 goats per household.

3.10.2.3 Goat Breeds

Goat husbandry in the region was dominated by the indigenous breeds that constituted 97 percent of the total goats in the region. Improved goats for meat and dairy goats constituted 0.02 percent and 2.9 percent respectively of the total goats.

3.10.2.4 Goat Population Trend

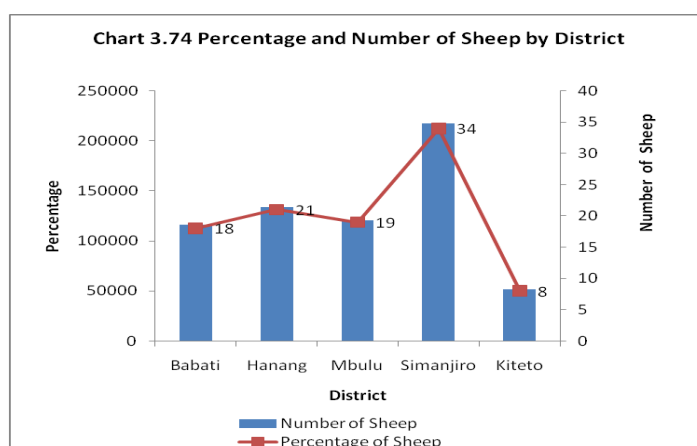
The overall annual growth rate of goat population from 2003 to 2008 was 7 percent. This positive trend implies a population increase from 991,152 in 2003 to 1,481,729 goats in 2008.

3.10.3 Sheep Production

Sheep rearing was the third most important livestock keeping activity in Manyara region after cattle and goats. The region ranked third out of 21 Mainland regions and had 10 percent of all the sheep on Tanzania Mainland.

3.10.3.1 Sheep Population

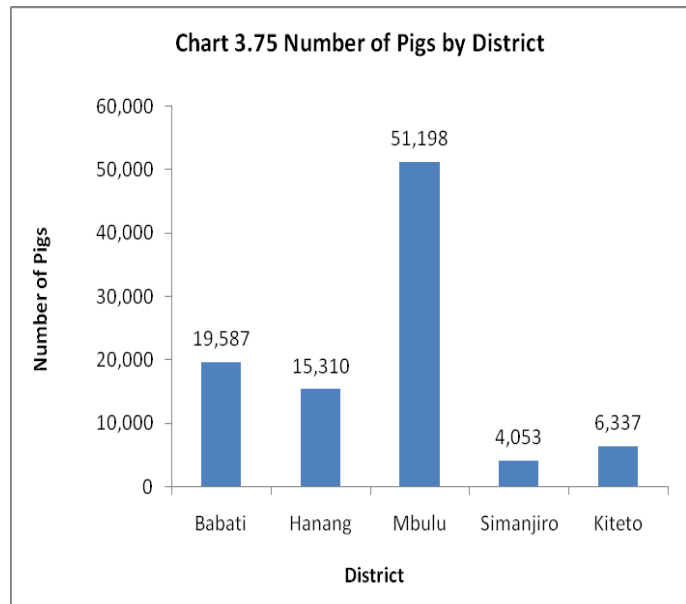
The number of sheep rearing households was 72,762 (36.7 % of all the agricultural households in the region) which reared 640,319 sheep, giving an average of 9 heads of sheep per sheep rearing household. The



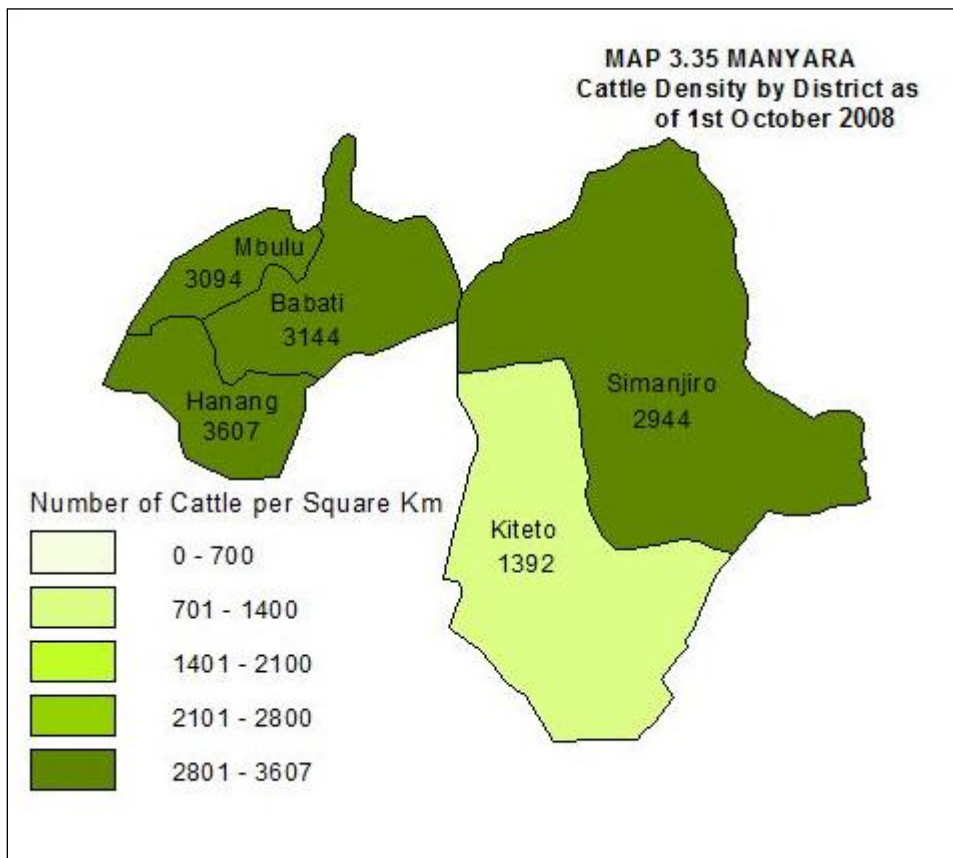
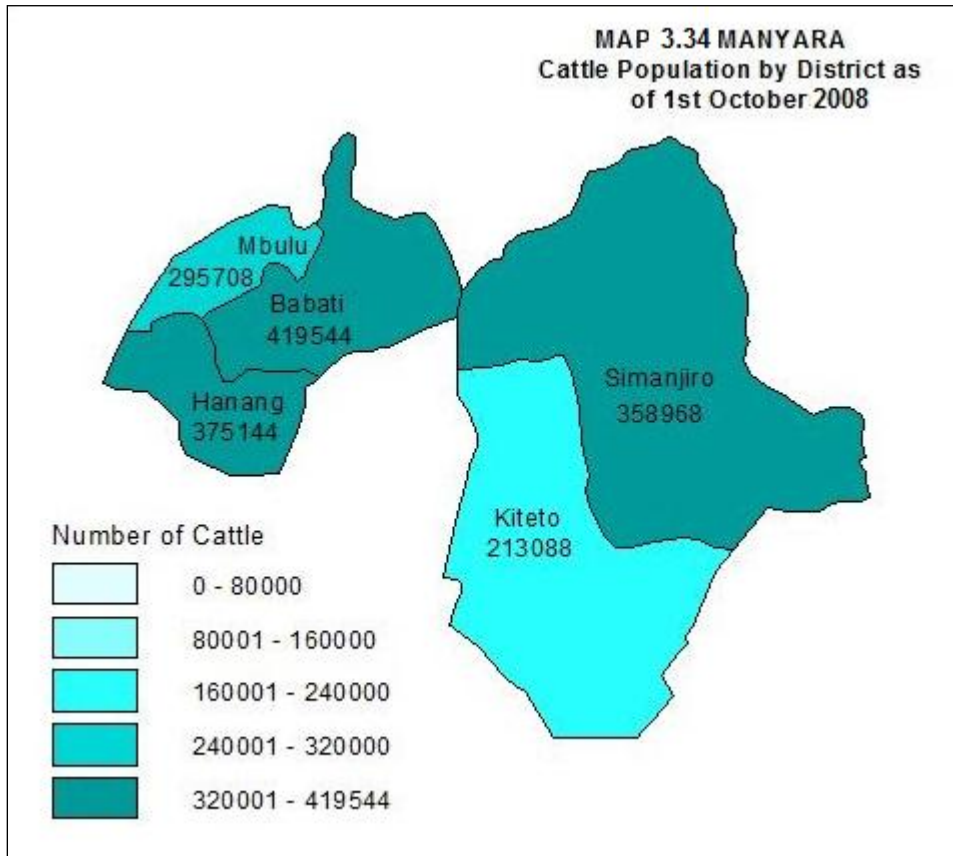
district with the largest number of sheep was Simanjiro with 217,926 sheep (34% of the total sheep in the region), followed by Hanang (133,695 sheep, 20.9%) Mbulu (120,910 sheep, 18.9%), Babati (116,417 sheep, 18.2%) and Kiteto (51,371 sheep, 8%), (Chart 3.74 and Simanjiro district had the highest density (1787 heads per sq. km), Indigenous breeds were the sole type of sheep reared in the region. Improved breeds were not recorded in the region during the 2007/08 census year.

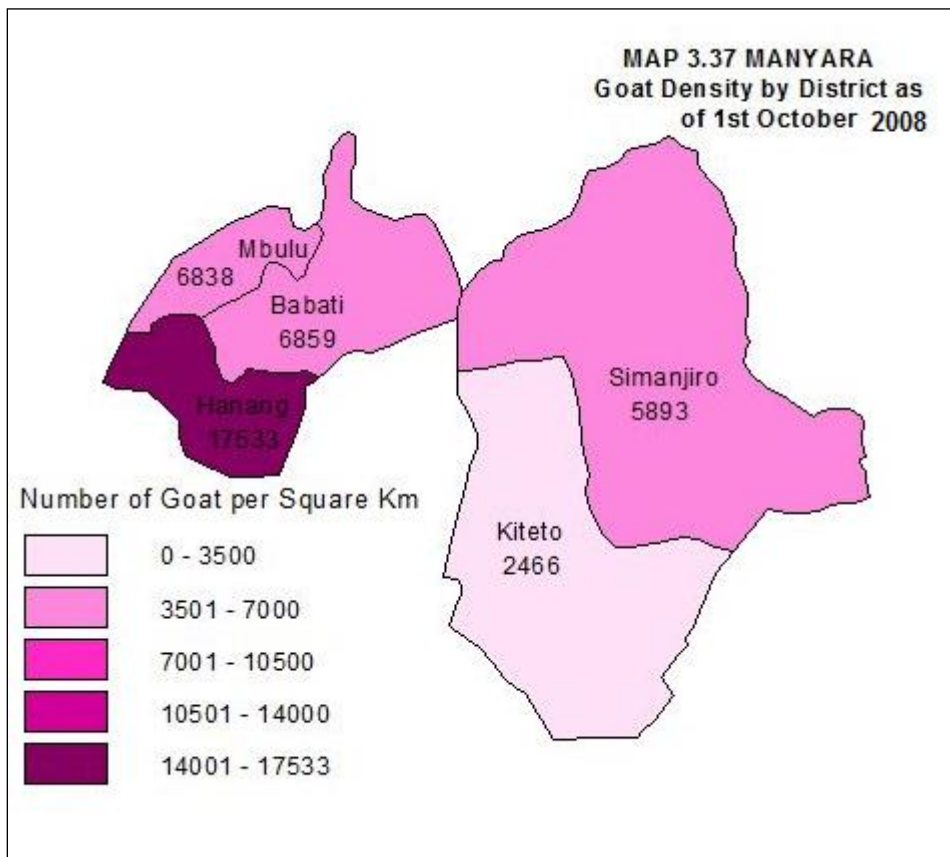
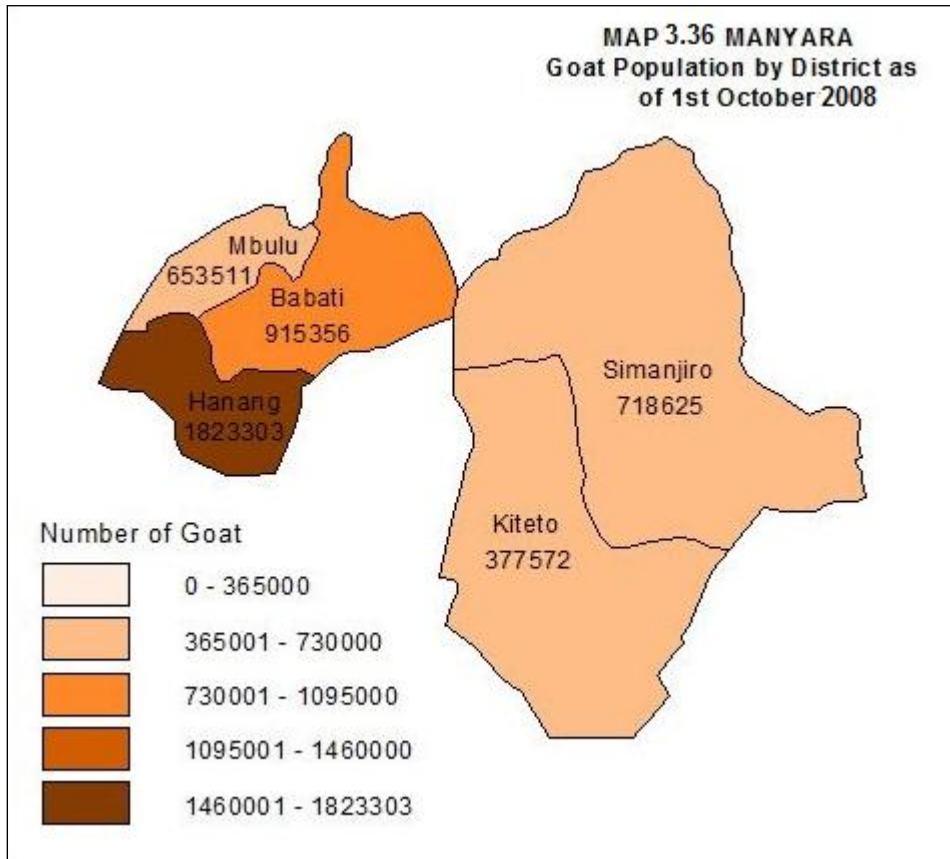
3.10.4 Pig Production

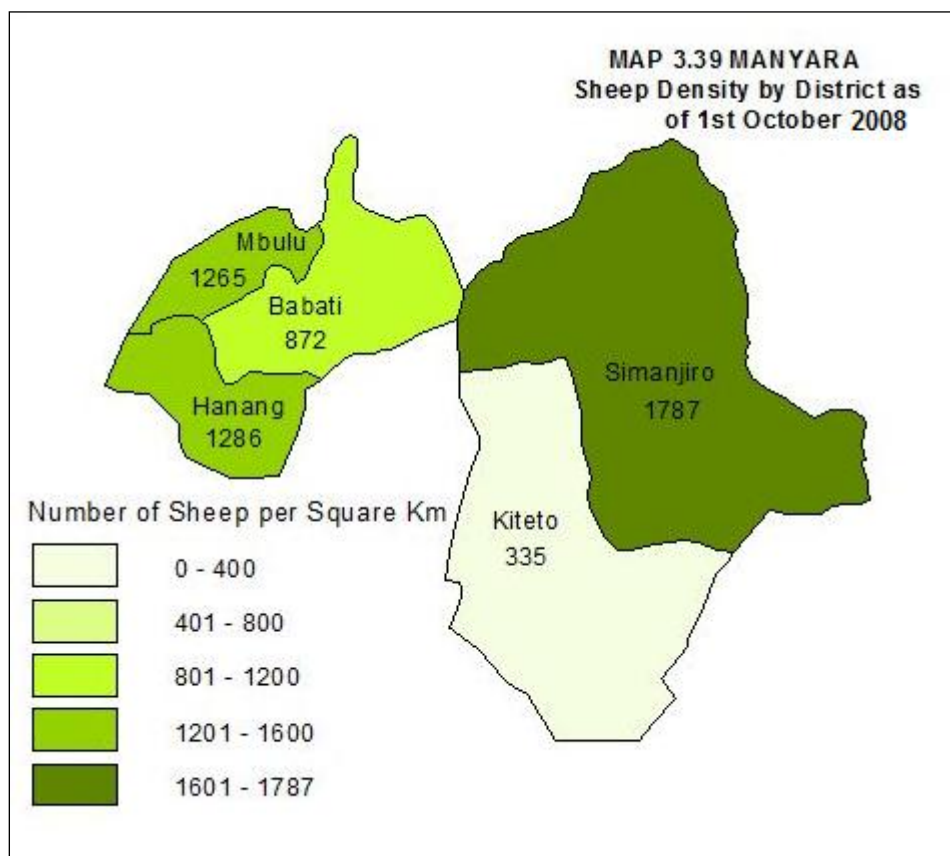
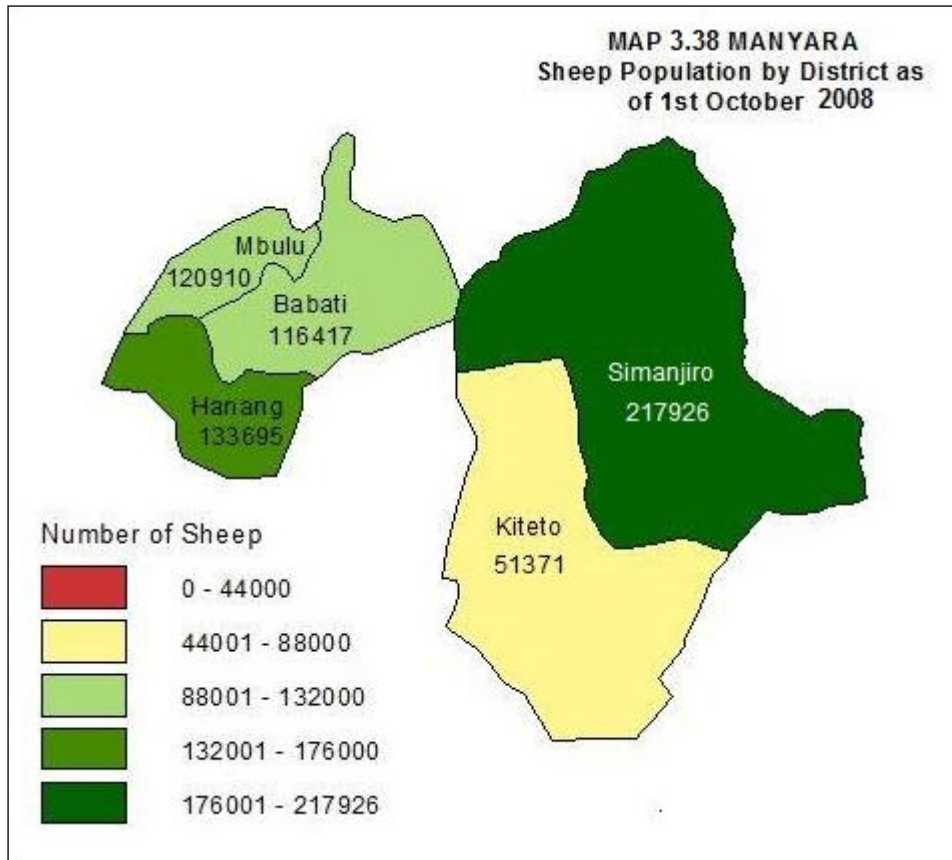
Piggery was the least important livestock keeping activity in the region after cattle, goats and sheep. The region ranks sixth out of 21 Mainland regions and had 6.1 percent of the Mainland total pigs. The number of pig rearing agricultural households in the region was 38,994 (19.6% of the total agricultural households in the region) which reared 96,485 pigs. This gives an average of 3 pigs per pig-rearing household. The district with the largest number of pigs was Mbulu

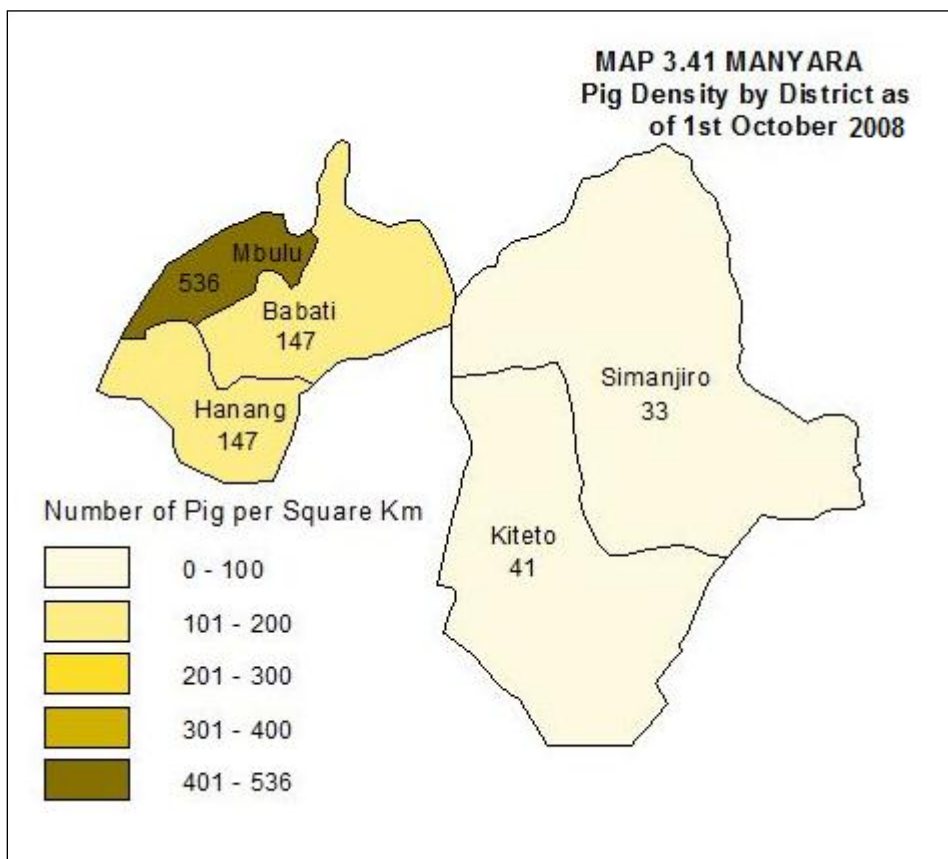
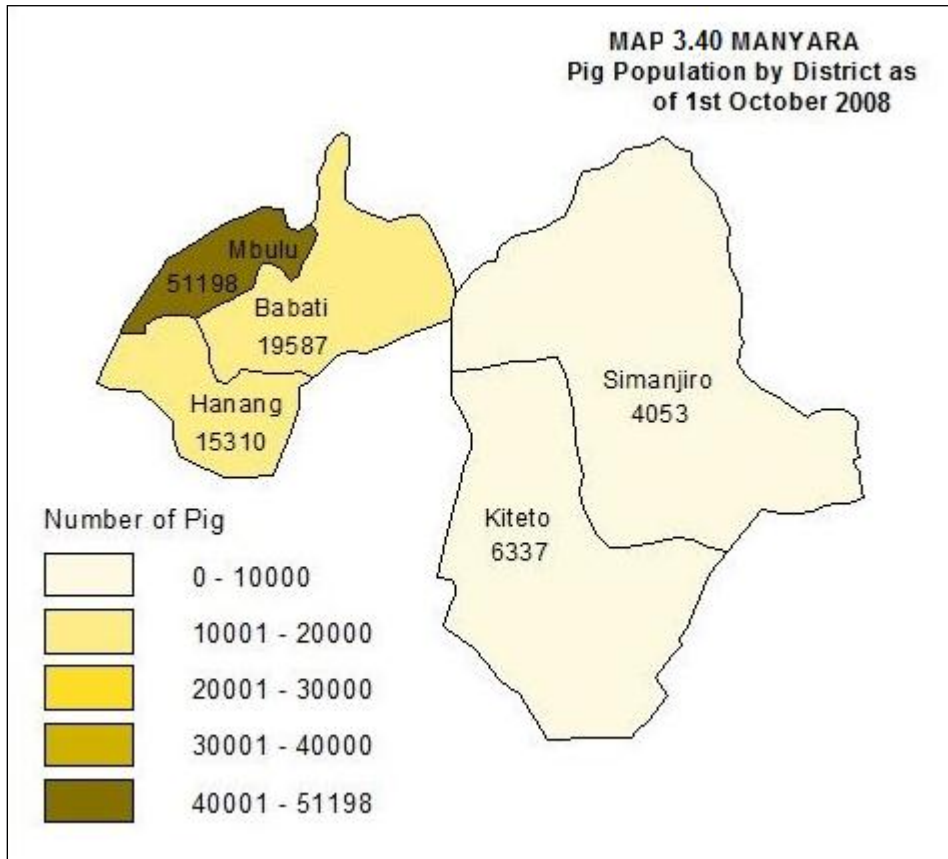


with 51,198 pigs (53.1% of the total pig population in the region), followed by Babati (19,587 pigs, 20.3%), Hanang (15,310 pigs, 15.9%), Kiteto (6,337 pigs, 6.6%) and Simanjiro (4,053 pigs, 4.2%), (Chart 3.75). However, Mbulu district had the highest density (536 heads per sq.km),







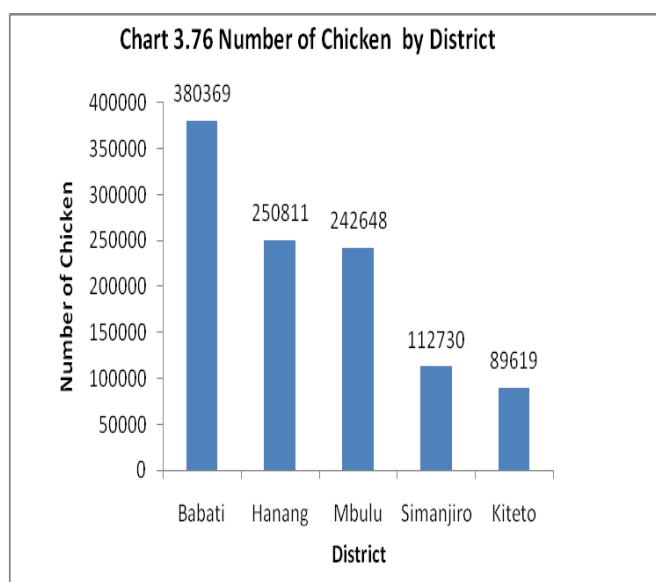


3.10.5 Chicken Production

The poultry sector in Manyara region was dominated by chicken. The region contributed 2.5 percent to the total chicken population in Tanzania Mainland.

3.10.5.1 Chicken Population

The number of households keeping chicken in the region was 129,378 raising about 1,076,179 chicken, giving an average of 8 chicken per chicken-rearing household. In terms of total number of chicken in the country, Manyara region was ranked nineteen out of the 21 Mainland regions. The district with largest number of chicken was Babati (380,369 chicken, 35.3% of the total number of chicken in the region), followed by Hanang (250,811, 23.3%), Mbulu (242,648,



22.5%), Simanjiro (112,730, 10.5%) and Kiteto (89,619, 8.3%), (Chart 3.76). However, Hanang district had the highest chicken density (17,545 chicks per sq. km),.

3.10.5.2 Chicken Flock Size

The results indicate that, about 99.4 percent of all chicken-rearing households were keeping 1-49 chicken with an average of 8 chicken per household. About 0.4 percent of the holders were reported to be keeping the flock size of 50 to 99 chicken, with an average of 51 chicken per household, and only 0.2 percent kept 100-299 chicken with an average of 127 chicken per household, (Table 3.18).

Table 3.18: Number and Percentage of Households Keeping Chicken and Average Number of Chicken per Household by Flock Size as of 1st October, 2008

Heard Size	Number of household	Percentage	Number of Chicken	Number of Chicken Per Household
1 - 49	132147	99.4	1,020,307	8
50-99	558	0.4	28,488	51
100-299	215	0.2	27,383	127

3.10.5.3 Improved Chickens (layers and broilers)

The total number of improved chicken in the region was 18,006 (9,686 layers and 8,321 broilers). Layers constituted 0.9 percent of the total chicken and 54 percent of the improved chicken in the region. The number of Broilers was slightly smaller, constituting 46 percent of the total number of improved chicken and 0.8 percent of the total chicken. Improved chicken were most common in Hanang, Babati and Mbulu districts. The number of layers is insignificant in Simanjiro and broilers were not reared at all in Simanjiro and Kiteto districts. The number of improved chicken over the five-year period from 2003 to 2008 has increased from 4,966 to 18,007 at a growth rate of 29 percent.

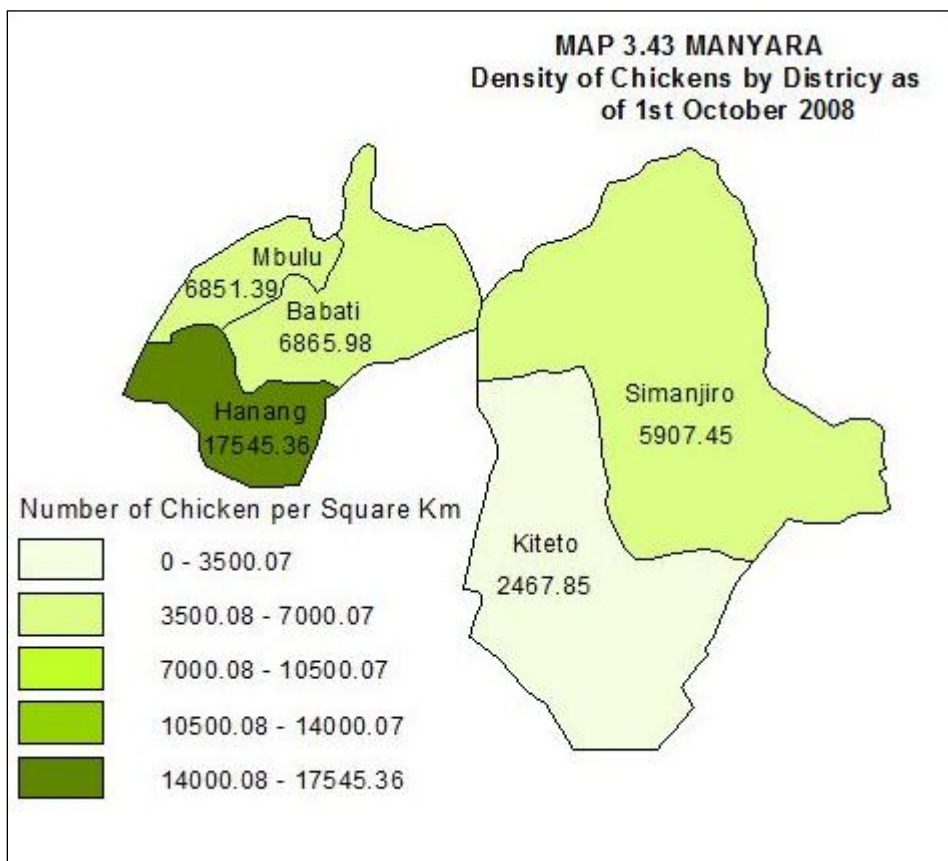
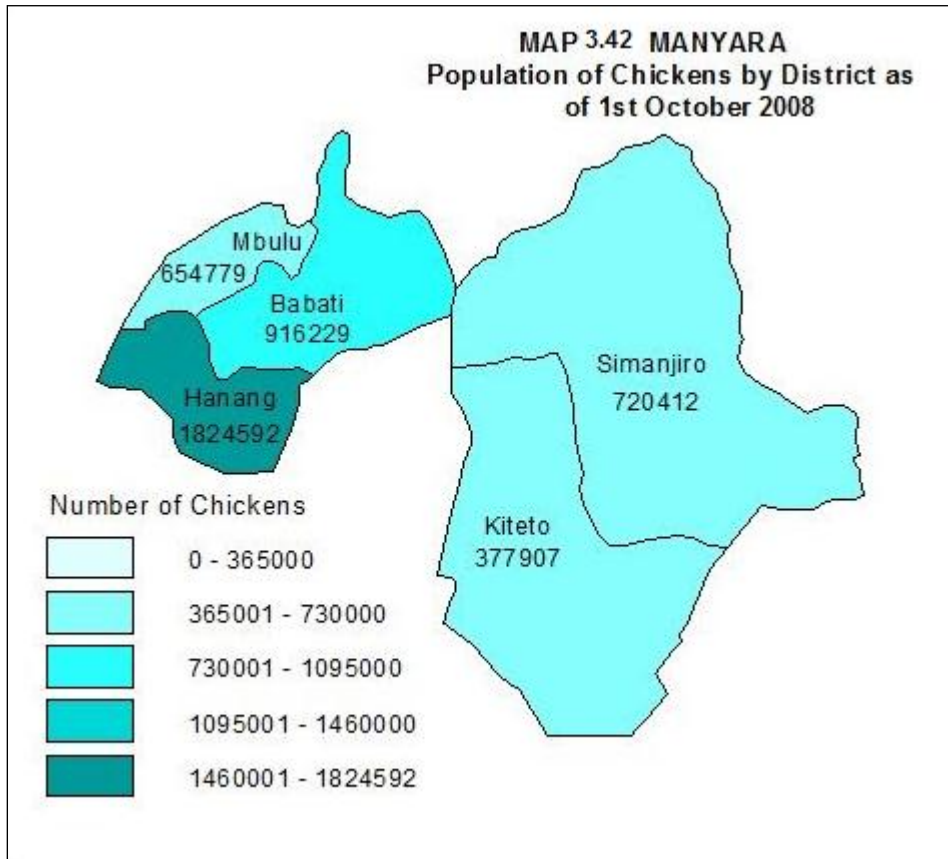
Broiler chicken population in the region has decreased at an annual rate of 12 percent for the period of five years from 4,529 in 2003 to 8,321 in 2008. Broilers were most important in Hanang district followed by Babati and Mbulu districts.

3.10.6 Other Livestock

The number of other livestock raised by rural agricultural households in the region includes 20,980 ducks, 132 guinea pigs, 7,007 turkeys, 827 rabbits, and 61,226 donkeys. Table 3.17 indicates the number of other livestock raised in each district. Donkeys had the largest population than any other livestock type raised by the rural agricultural households in Manyara. Ducks were the second largest type. The biggest number of ducks in the region was found in Babati district (47.4% of all the ducks in the region), followed by Hanang (28.4%), Kiteto (14.2%), Mbulu (5.9%), and Simanjiro (4.1%). Guinea pigs were raised only in Simanjiro and Kiteto districts while Turkeys were reported in Hanang and Mbulu districts only. Rabbits were raised in all districts except Simanjiro and Kiteto districts. Donkeys were raised in all the districts and Hanang district recorded the highest number followed by Simanjiro district, (Table 3.19).

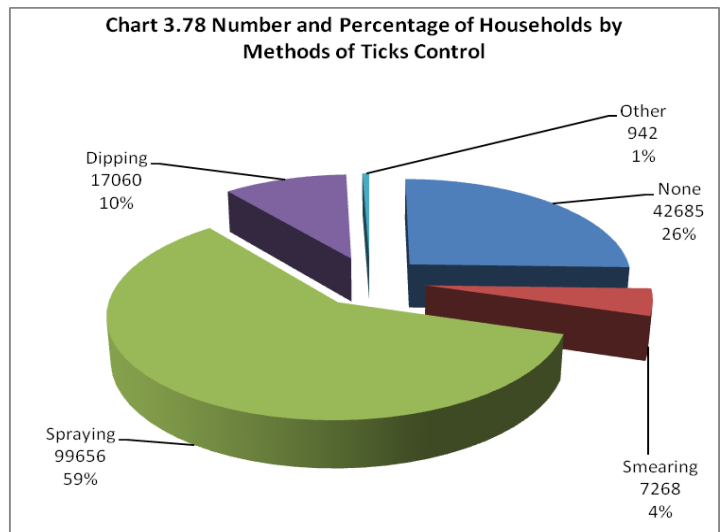
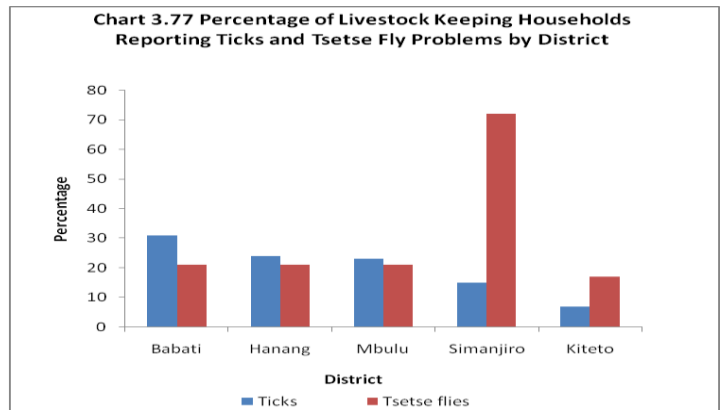
Table 3.19: Number and Percentage of Other Livestock by Type of Livestock and District as of 1st October, 2008

District	Ducks	%	Guinea pigs	Turkeys	Rabbits	Donkeys	Horses	Dogs
Babati	9,952	47.4	0	0	316	7,898	0	16,112
Hanang	5,948	28.4	0	2,145	98	23,209	0	25,842
Mbulu	1,241	5.9	0	4,861	414	7,964	0	13,446
Simanjiro	856	4.1	57	0	0	17,980	0	12,614
Kiteto	2,982	14.2	75	0	0	4,175	0	3,653
Total	20,980	100.0	132	7,007	827	61,226	0	71,667

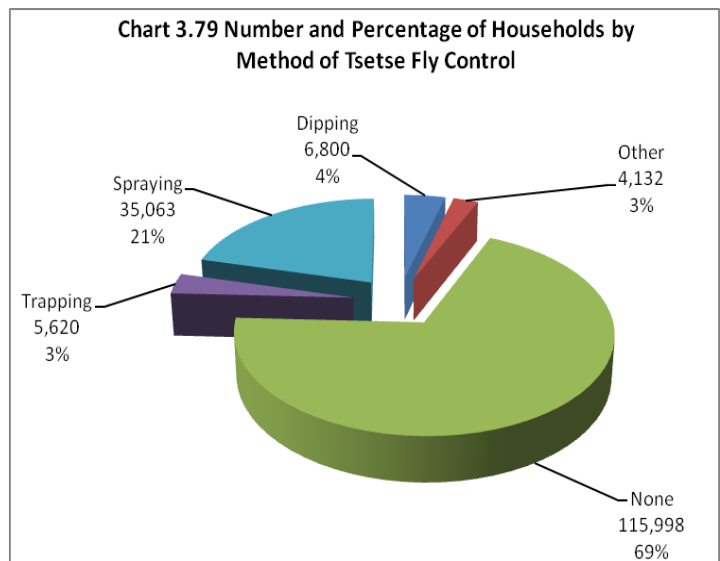


3.10.7 Pest and Parasite Incidence and Control

The results indicate that 68 percent and 27 percent of the total livestock-keeping households reported to have encountered tick and tsetse fly problems respectively. Chart 3.77 shows that there was a predominance of ticks related diseases over tsetse related diseases in Simanjiro and Kiteto districts, while the opposite trend was recorded in the rest of the districts. Incidences of tsetse problem was highest in Simanjiro district and lowest in Kiteto district. The incidences of ticks problem was highest in Babati and lowest in Kiteto district, The most practiced method of ticks controlling was spraying with 59 percent of the livestock-rearing households that reported the problem using the method.



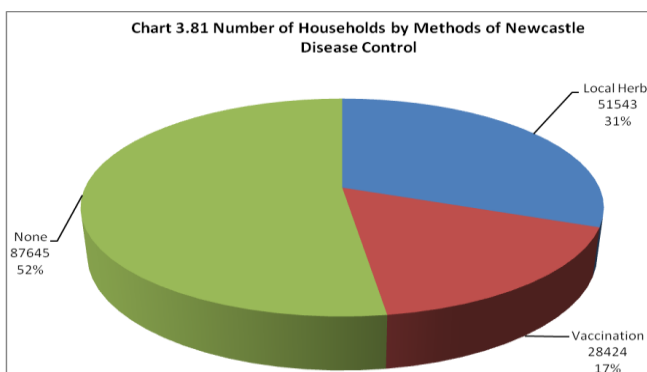
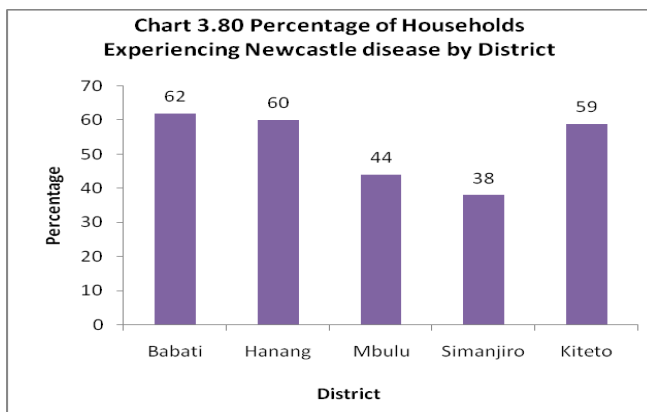
Other methods used were dipping (10%), smearing (4%) and other traditional methods like hand picking (1%). However, 26 percent of the livestock-keeping households did not use any method.



The most common method used to control tsetse flies was spraying which was practiced by 21 percent of the livestock rearing households which reported the problem, followed by dipping (4%), trapping (3%) and other traditional methods (3%). However, 69 percent of the livestock rearing households did not use any method.

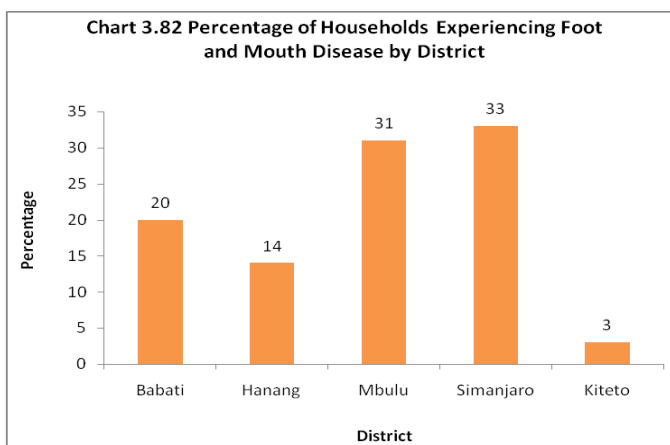
3.10.7.1 Newcastle Disease

The district with the highest incidence of Newcastle Problem was Babati (62% of households in the district), closely followed by Hanang (60%) and Kiteto (59%). Newcastle problem was moderately experienced in Mbulu (44%), and least experienced in Simanjiro (38%)(Chart 3.80). The widely used method for Newcastle control was local herbs, used by 31 percent of livestock rearing households. This is followed by vaccination (17%). However there was 52 percent of livestock rearing households who reported to use none of the mentioned methods (Chart 3.81).



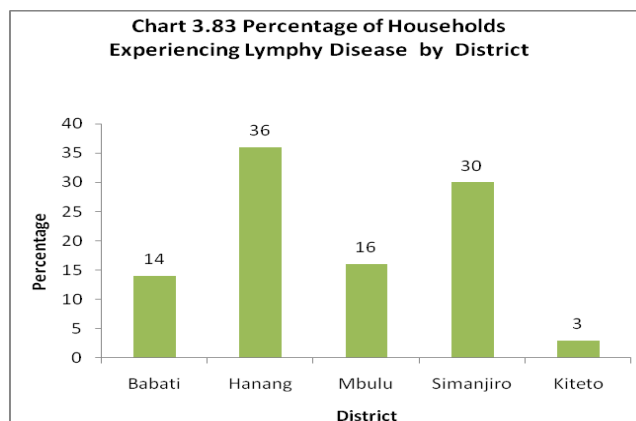
3.10.7.2 Foot and Mouth Disease

Foot and Mouth Problem in the region affected livestock keeping households in all the districts with big variations across the districts. The prevalence of the problem was highest in Simanjiro (33%), followed by Mbulu (31%). FMD was moderately reported in Babati (20%) and Hanang (14%) and least reported in Kiteto district (3%), Chart 3.82).



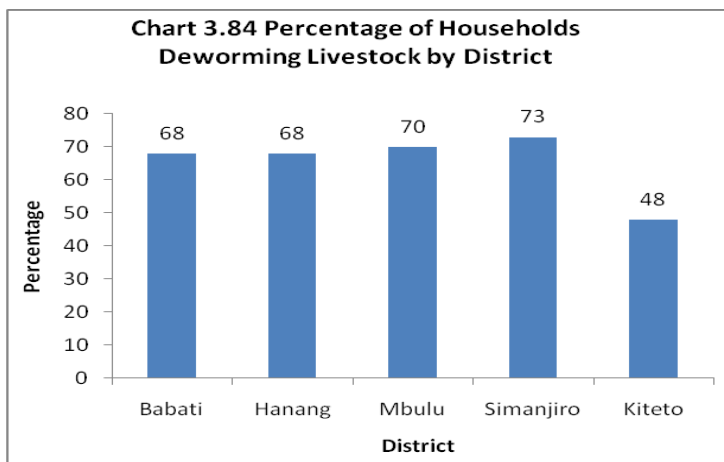
3.10.7.3 Lymphskin Disease

Lymphskin disease problem was highly reported in Hanang (36 % of livestock keeping household in the region), followed by Simanjiro district (30%), Mbulu (16%), and Babati (14%). Kiteto had the least reported incidence of the disease in the region (3%), (Chart 3.83).

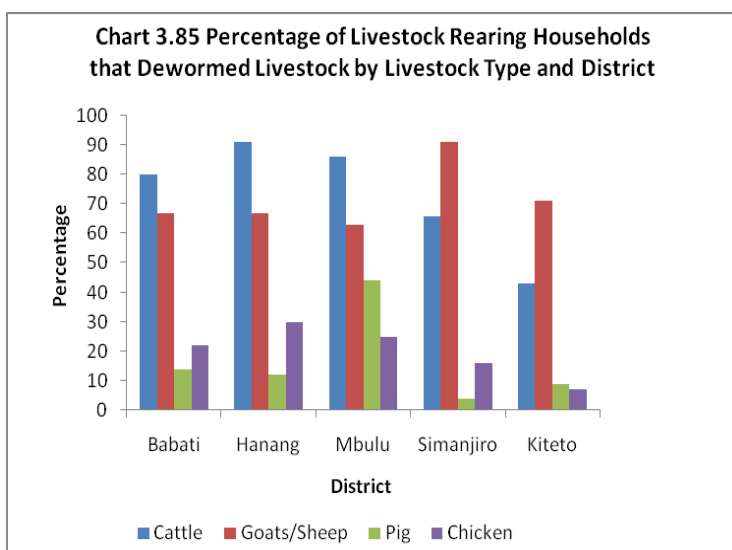


3.10.7.4 Deworming

Livestock rearing households that dewormed their animals were 217,509 (41.9% of the total livestock rearing households in the region). The percentage of the households that dewormed their livestock was highest in Simanjiro (73%) followed by Mbulu (70%), Hanang (68%), Babati (68%) and Kiteto (48%), (Chart 3.84).

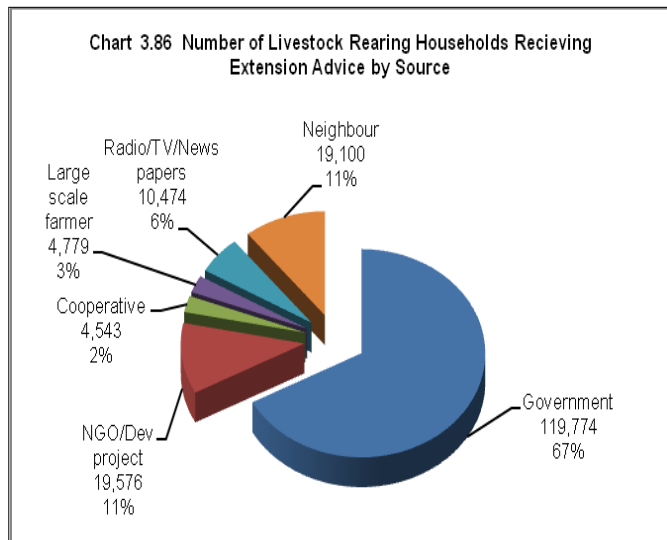


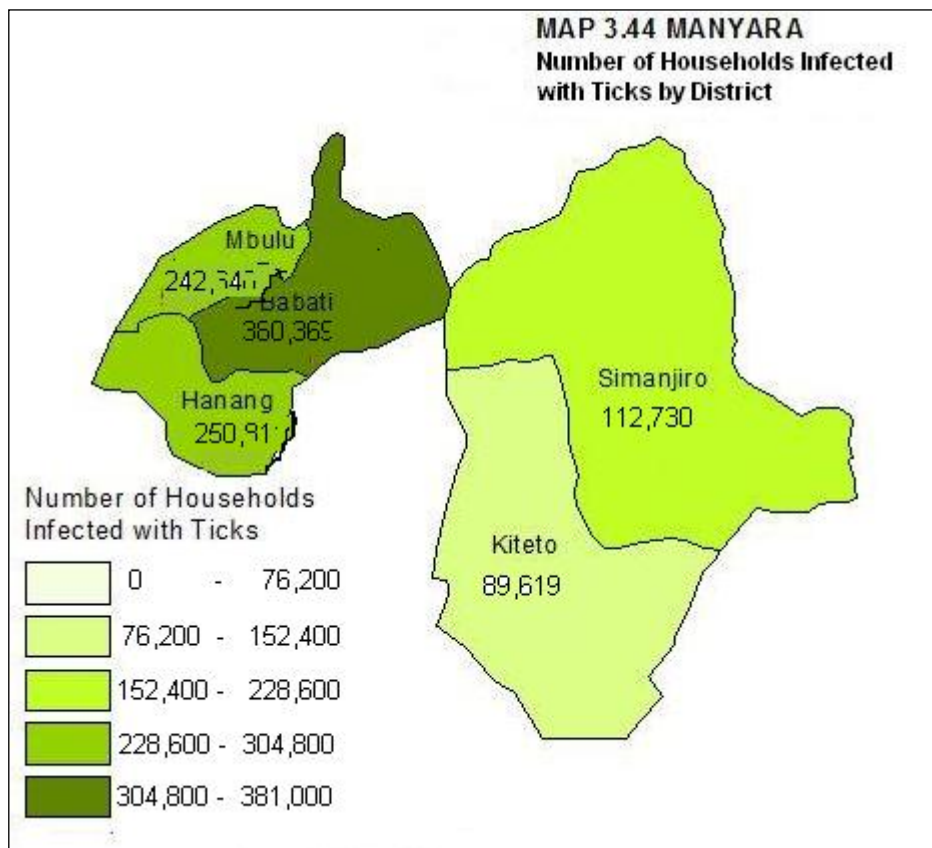
Hanang district had the highest percentage (91%) of the livestock rearing households which dewormed their cattle followed by Mbulu (86%), Babati (80%) and Simanjiro district (66%). The lowest percentage of the households which dewormed cattle was in Kiteto (43%). Simanjiro had the highest percentage of livestock rearing households which dewormed goats (91%), followed by Kiteto (72%), Babati and Hanang (67 percent each). Mbulu had the lowest percentage of households deworming goats (63%). Mbulu was leading in deworming Sheep and pigs at 44 and 79 percents respectively (Chart 3.85).



Access to Livestock Extension Services

The total number of households that received livestock advice was 178,246, representing 89.8 percent of the total livestock-rearing households in Manyara region. The main livestock extension agent was the government which provided service to about 67 percent of all the households which received livestock extension services. The rest of the households got services from NGOs/development projects (11%), neighbours (11%), Radios/TVs/Newspapers (6%), large scale farms (3%) and Cooperatives (2%), (Chart 3.86).



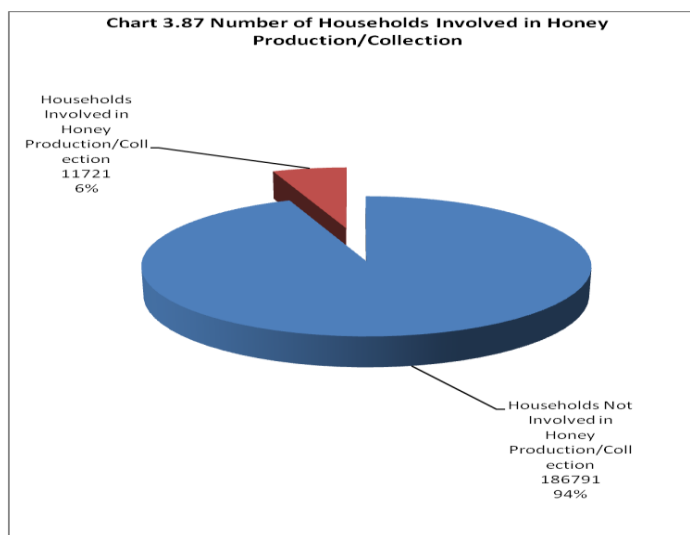


3.11 Bee Keeping

Bee keeping was practised in all the districts by livestock rearing households in the region. Two types of beehives were used which include improved and local whereby, the improved type was widely used. In both types, sting and stingless bees were kept.

3.11.1 Honey Production

In Manyara region, 11,721 of livestock rearing households were involved in bee keeping. This represented 6 percent of the total agricultural households in the region. The leading districts in honey production were Babati which produced 278,011 litres (46.1% of the total litres produced in the region), with an average of 8,688 litres per household, followed by Hanang which produced 222,727 litres (36.9%), with an



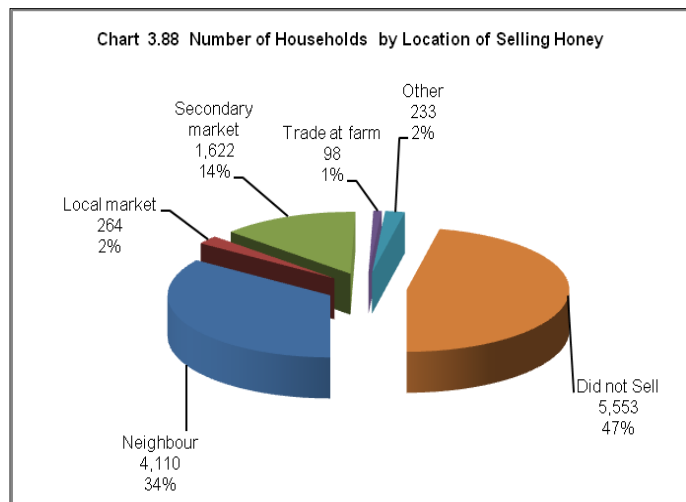
average of 8,566 litres per household. Mbulu produced 47,061 litres (7.8%), with an average of 1,623 litres per household, and Kiteto which produced 43,020 litres (7.1%), with an average of 2,689 litres per household. Although Simanjiro was the least honey producing district with only 11,987 litres (2%), it had a moderate average of amount of honey produced per household of 3,996 litres, (Chart 3.87, Table. 3.20).

Table 3.20: Amount of Honey Produced per Households and by District

Districts	Litres harvested	Percentage	Number of Households	Litres per Households
Babati	278,011	46.1	32	8,688
Hanang	222,727	36.9	26	8,566
Mbulu	47,061	7.8	29	1,623
Simanjiro	11,987	2.0	3	3,996
Kiteto	43,020	7.1	16	2,689
Total	602,805	100.0	106	25,561

3.11.2 Selling of Honey

Slightly over a half of all the produced honey was sold to various outlets. Most of the honey was sold to the neighbours by 4,110 households (34 percent of the honey producing households in the region) followed by secondary market (1,622 households, 14%), Local Market (264 households, 2%), and trade at farm (98 households, 1%), (Other 233 households, 2%). However, 5,188 households or 47



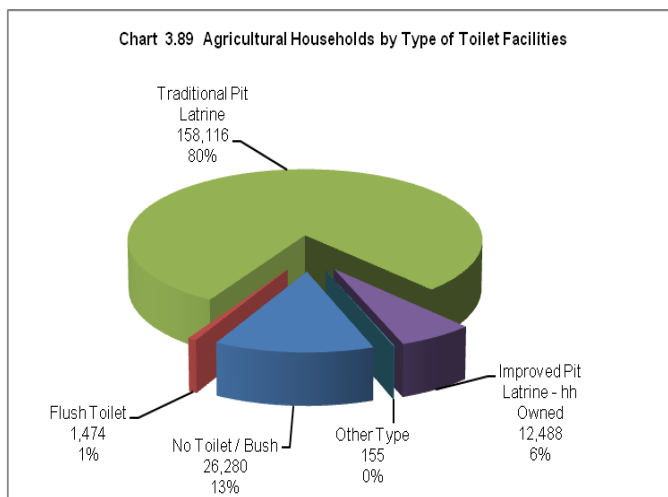
percent of the agricultural households involved in honey production reported not to have sold their honey, (Chart 3.88).

3.12 Povert Indicators

The 2007/08 agricultural census collected data on poverty for the purpose of providing a base for tracking progress in poverty reduction strategies undertaken by the government.

3.12.1 Type of Toilets

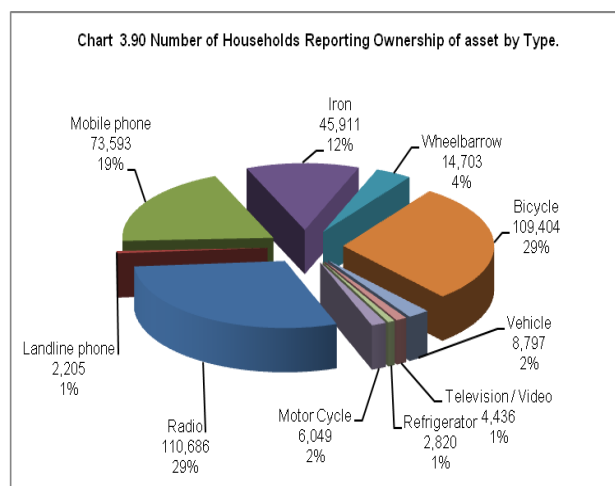
Large number of rural agricultural households used traditional pit latrines (158,116 households, 80% of all the rural agricultural households), 12,488 households (6%) used improved pit latrine and 1,474 households (1%) used flush toilets. The remaining 155 households (0.1%) used other toilet facilities. However, 26,280 households (13%) had no toilet facilities, (Chart 3.89).



The distribution of the households without toilets within the region indicates that 53.6 percent were found in Simanjiro district and 19.26 percent were from Kiteto. The percentages of households without toilets in other districts were as follows; Hanang (11.85%), Babati (3.22%), and Mbulu (3.21%), (Map 3.45).

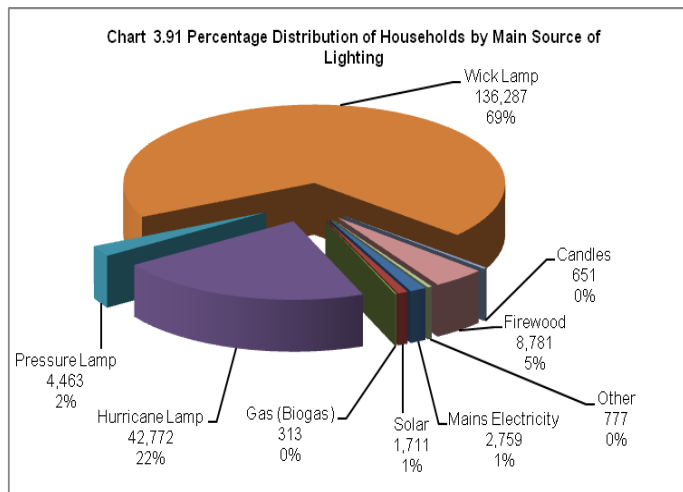
3.12.2 Household's Assets

The Radios/Cassette/Music Systems were the assets owned by most of the rural agricultural households in Manyara region. A total of 110,686 households (30% of the agriculture households in the region) owned the assets, followed by bicycle (109,404 households, 29%), mobile phone (73,593 households, 20%), pressing iron (45,911 households, 12%), wheelbarrow (14,703 households, 4%), vehicle (8,797 households, 2%), television/video (4,436 households, 1%), refrigerator (2,820 households, 1%), and landline phone (2,205 households, 1%), (Chart 3.90).



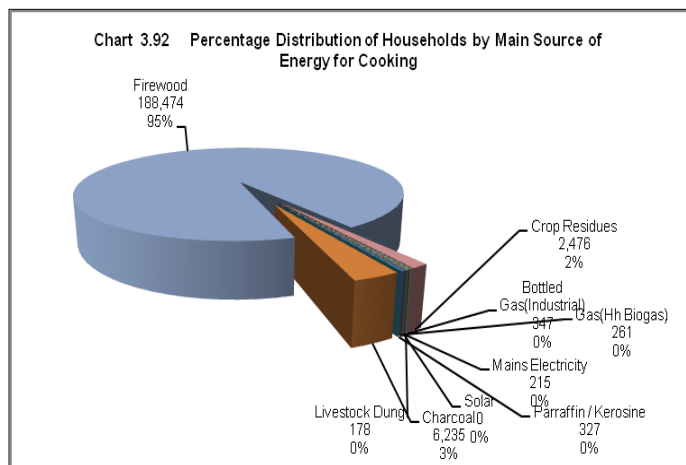
3.12.3 Sources of Lighting Energy

Wick lamp was the most common source of lighting energy in the region with 69 percent of the total rural households which used such source of energy, followed by hurricane lamp (22%), firewood (5%), pressure lamp (2%), mains electricity (1%), and solar (1%). The remaining sources were minor which represented less than 1 percent each, (Chart 3.91).



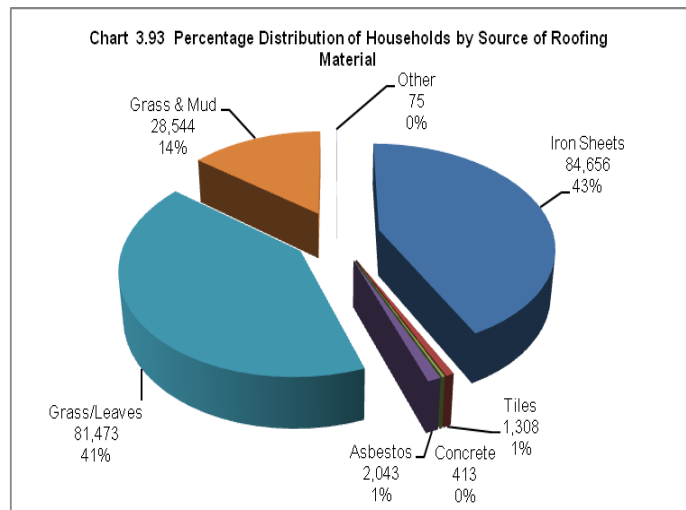
3.12.4 Sources of Energy for Cooking

The most prevalent source of energy for cooking was firewood, which was used by 95 percent of all rural agricultural households. The second most common source of energy for cooking was charcoal (3 percent), and crop residues (2%). The rest of energy sources accounted for less than 1 percent each. (Chart 3.92)



3.12.5 Roofing Materials

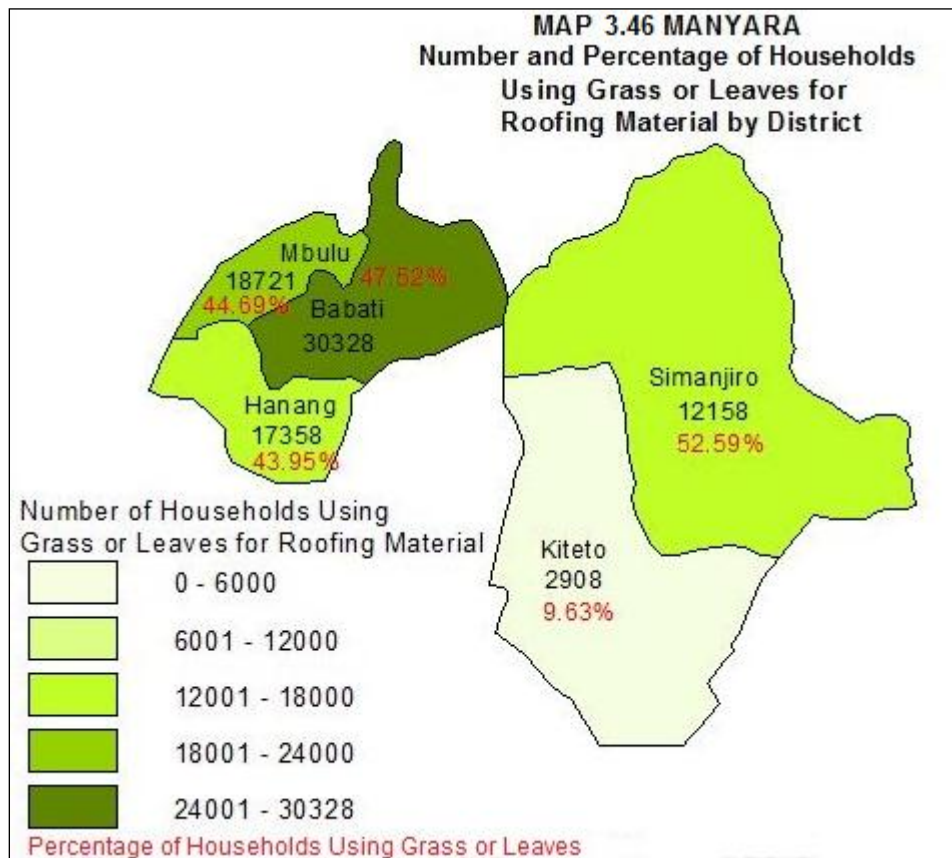
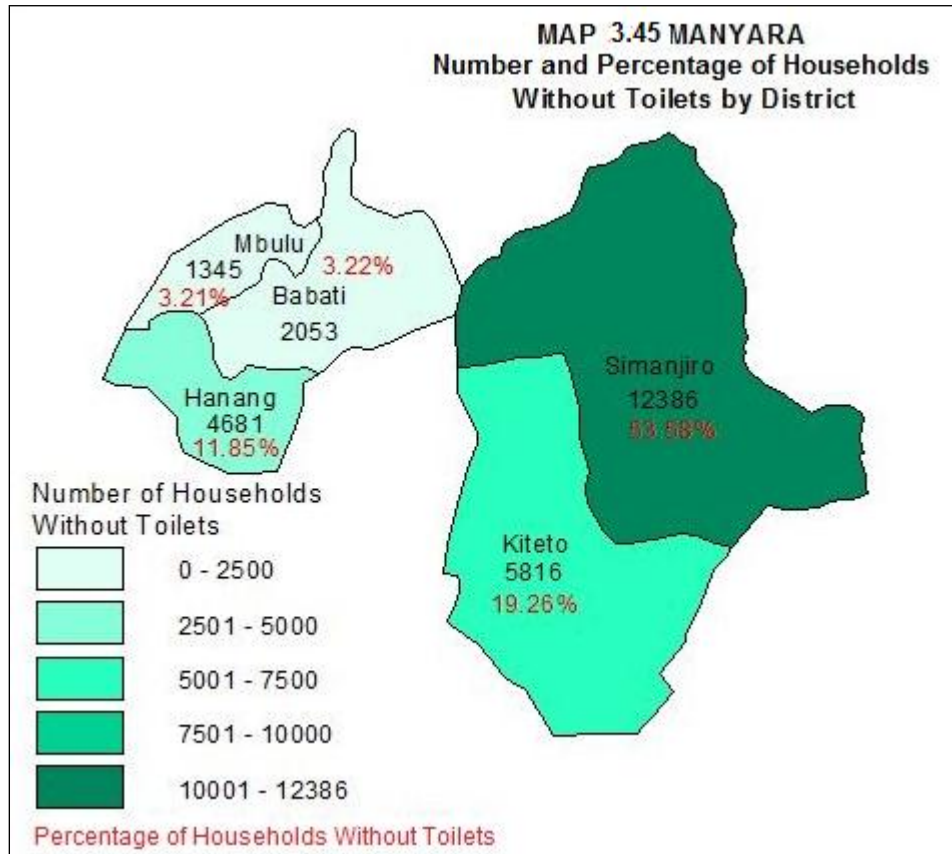
The most common material used for roofing of housing in the region was iron sheet used by 50 percent of the rural agricultural households followed by grass/leaves (48%), grass and mud (14%), tiles and asbestos each accounting for 1 percent. The remaining types of roofing materials were minor which represented less than 1 percent each, (Chart 3.93). These were concrete and other roofing material.



Simanjiro district had the highest percentage of households with both grass/leaves roofing by 53%, followed by Babati (48%) Mbulu district (25%). Kiteto district had the highest percentage of households with iron sheets by 70 percent followed by Babati (47%). Mbulu had had the lowest percent of households with iron sheet (29%), Hanang (32%), and Simanjiro (38%) (Table 3.21 and Map 3.46).

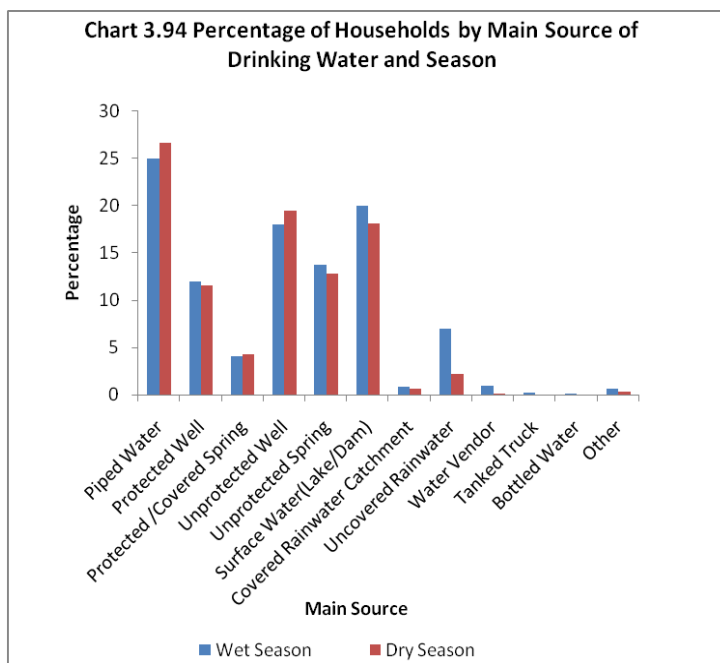
Table 3.21: Number of Household Reporting Average Number of Rooms and Type of Roofing Material by District

District	Number of rooms	Iron Sheets		Tiles		Concrete		Asbestos		Grass/leaves.		Grass & mud..		Other (Specify)	
	Mean	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	3	30,170	47	316	0	316	0	316	0	30,328	48	2,369	4	0	0
Hanang	2	12,580	32	390	1	98	0	975	2	17,358	44	8,094	20	0	0
Mbulu	2	11,998	29	414	1	0	0	621	1	18,721	45	10,136	24	0	0
Simanjiro	2	8,733	38	114	0	0	0	57	0	12,158	53	2,055	9	0	0
Kiteto	2	21,175	70	75	0	0	0	75	0	2,908	10	5,890	20	75	0
Total	2	84,656	43	1,308	1	413	0	2,043	1	81,473	41	28,544	14	75	0

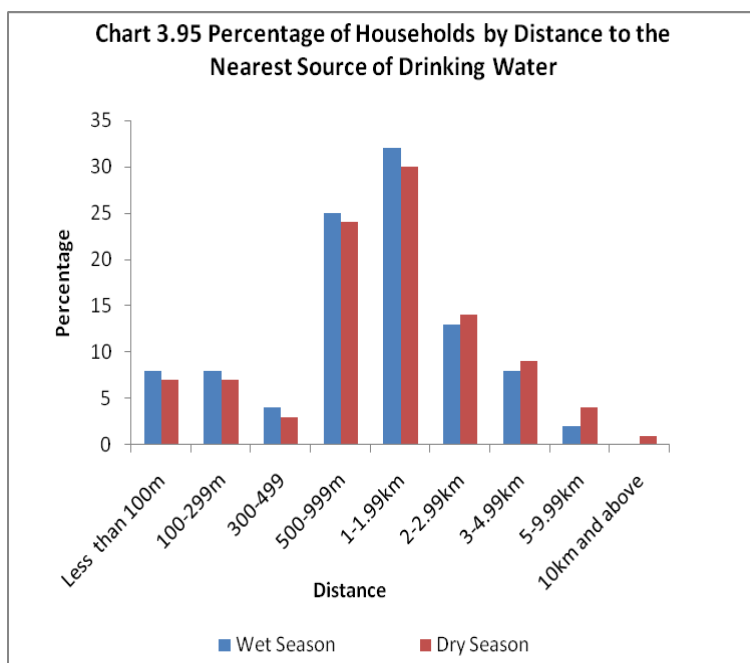


3.12.6 Access to Drinking Water

The main source of drinking water for the rural agricultural households in the region was piped water (26.7 percent of the households) followed by unprotected wells (19.5%), surface water (18.1%), unprotected spring (12.8%), protected well (11.6%), protected covered spring (4.3%), and uncovered rain water catchment (2.2%). The remaining sources were least used and accounted for less than 1 percent each, (Chart 3.94).



About 48 percent of the rural agricultural households obtained their drinking water within a distance of less than one kilometer during the wet season compared to 38 percent of the households during the dry season. However, 52 percent of the agricultural households obtained their drinking water from a distance of more than one kilometer during the wet compared to 62 percent of the households in the dry season. The most common distance from the source of drinking water was between 1 and 2 kms, (Chart 3.95).



3.12.7 Food Consumption Pattern

3.12.7.1 Number of Meals per Day

The majority of the households in Manyara region normally had 3 meals per day (116,022 households, 58 percent of the households in the region) followed by those who had 2 meals per day (78,972 households, 40 percent) and 1 meal per day (3,518 households, 2 percent). Babati district had the highest percentage of households having three meals per day (71%), whilst Simanjiro, Hanang and Kiteto had the lowest percentage of the households having 3 meals per day, with district accounting for 49 percent, (Table 3.22 and Chart 3.96, and Map 3.47).

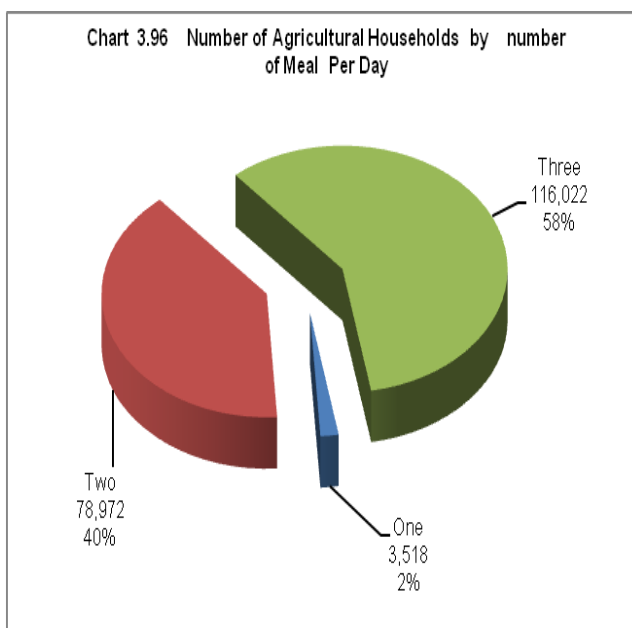
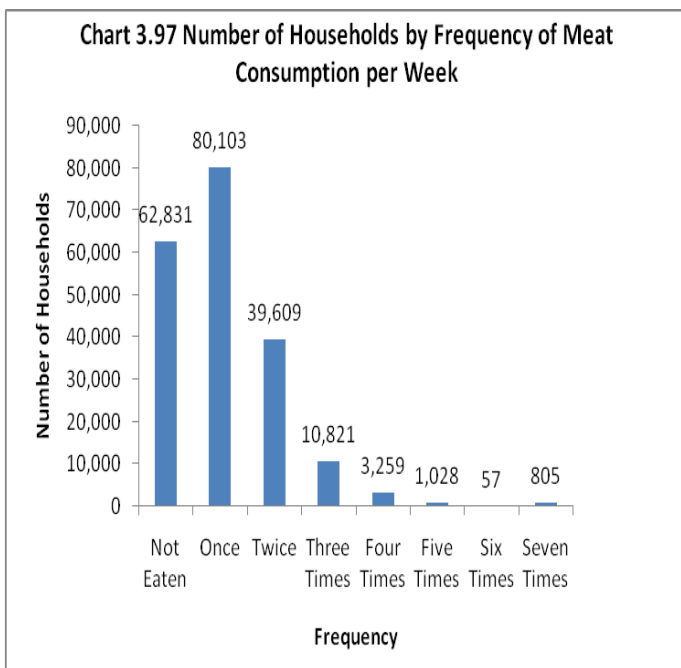


Table 3.22: Number and Percentage of Households by Number of Meals per Day by District

District	Number of Meals per day							
	One	%	Two	%	Three	%	Total	%
Babati	632	1	18,008	28	45,177	71	63,816	100
Hanang	683	2	19,503	49	19,308	49	39,494	100
Mbulu	0	0	16,342	39	25,547	61	41,889	100
Simanjiro	2,055	9	9,760	42	11,302	49	23,117	100
Kiteto	149	0	15,359	51	14,688	49	30,196	100
Total	3,518	2	78,972	40	116,022	58	198,513	100

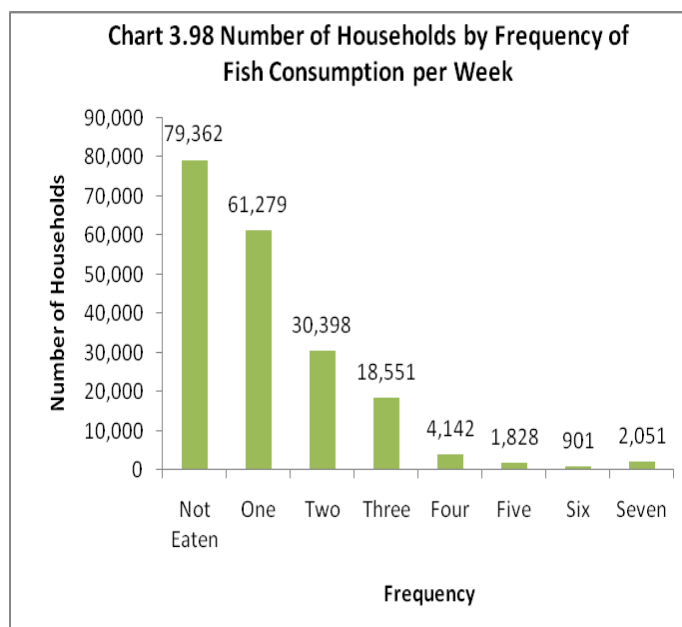
3.12.7.2 Meat Consumption Frequency

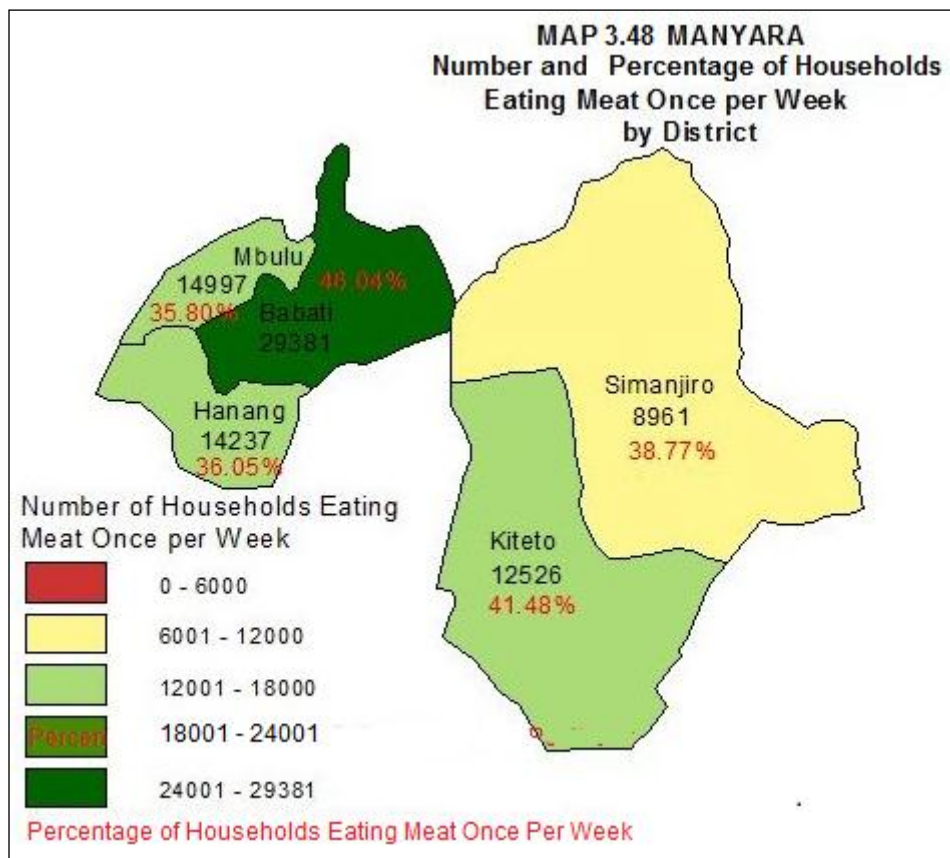
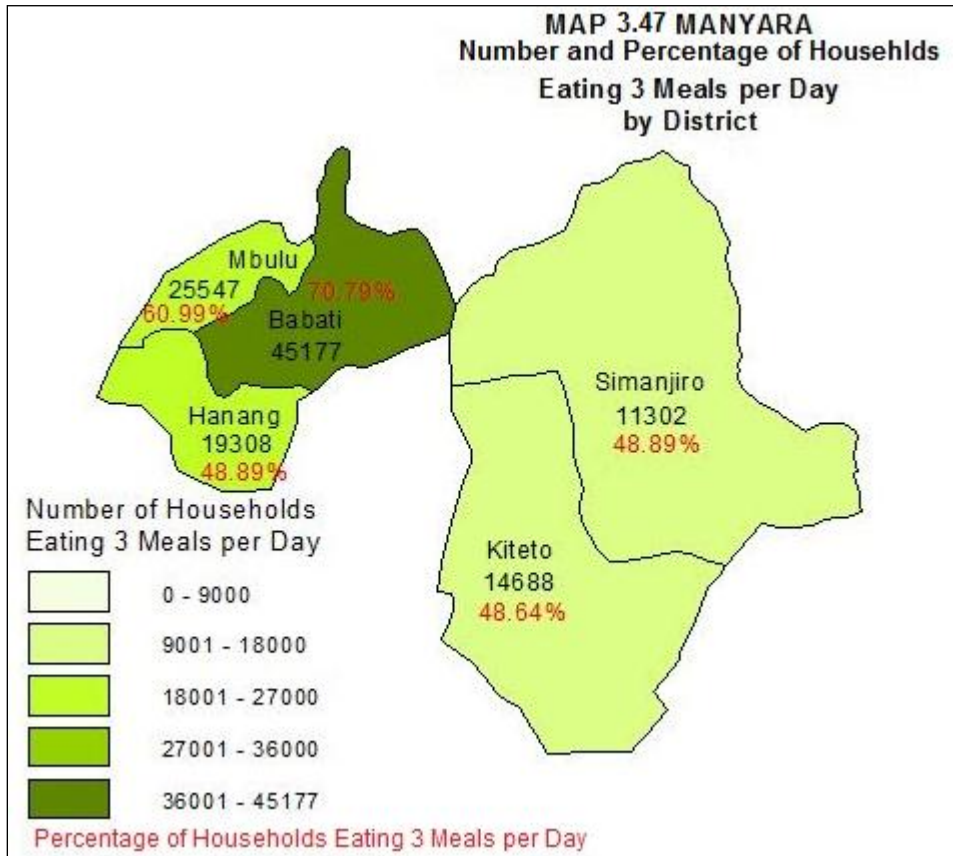
The number of agricultural households that consumed meat during the week preceding the census was 135,682 (68.3% of the agricultural households) with 80,103 households (59 % of those who consumed meat) consuming meat only once during the respective week followed by those (29%) who had meat twice during the week. Very few households had meat three or more times during the respective week. About 62,831 (46 percent of the agricultural households) did not eat meat during the week preceding the census, (Chart 3.97 and Map 3.48).

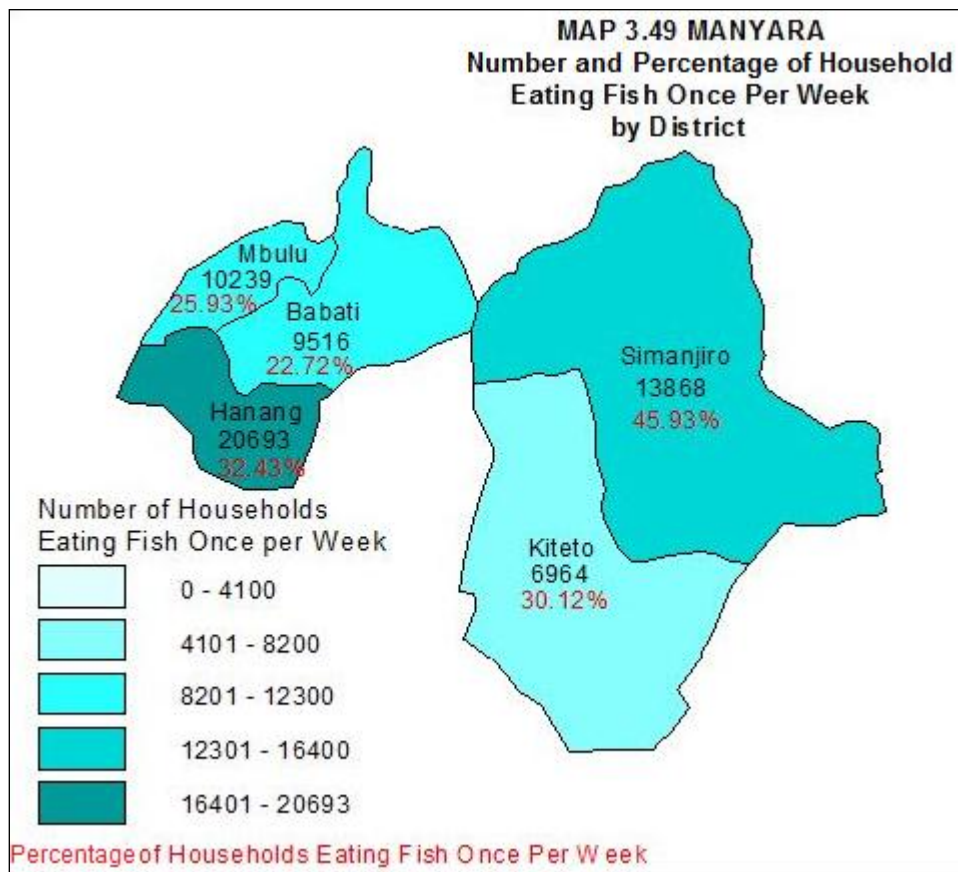


3.12.7.3 Fish Consumption Frequencies

The number of agricultural households that consumed fish during the week preceding the census was 119,151 (60% of the total agricultural households in Manyara region) with 61,279 households (51.4 % of those who consumed fish) consumed fish once during the respective week. This was followed by those who had fish twice (25.5%). In general, the percentage of households that consumed fish three times or more during the week in Manyara region was 18551 (15.6% of the agricultural households that ate fish in the region during the respective period). About 40 percent of the agricultural households in Manyara region did not eat fish during the week preceding the census (Chart 3.98 and Map 3.49).

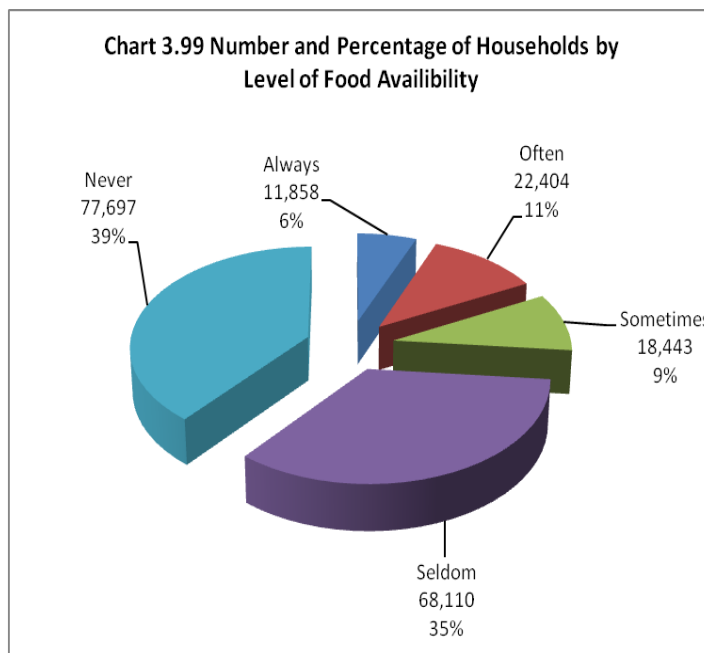






3.12.8 Food Security

In Manyara region, 68110 households (35% of the total agricultural households in the region) said they seldom experienced problems in satisfying the household food requirement, whilst 18,443 households (9%) said they sometimes experience problems. The number of households that often experienced problems was 22,404 households (11%), however 11,858 households (6%) said they always had problems in satisfying the household

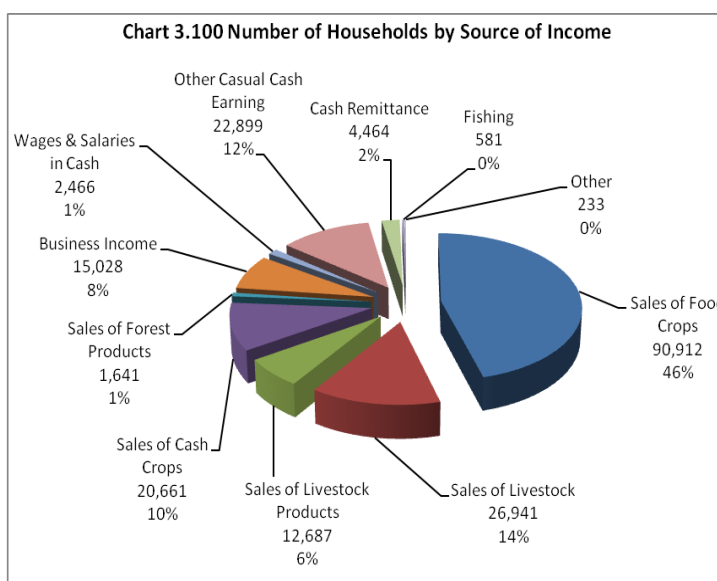


food requirement. About 77,697 agricultural households (39%) said they never experience any food sufficiency problems (Chart 3.99, Map 3.50).

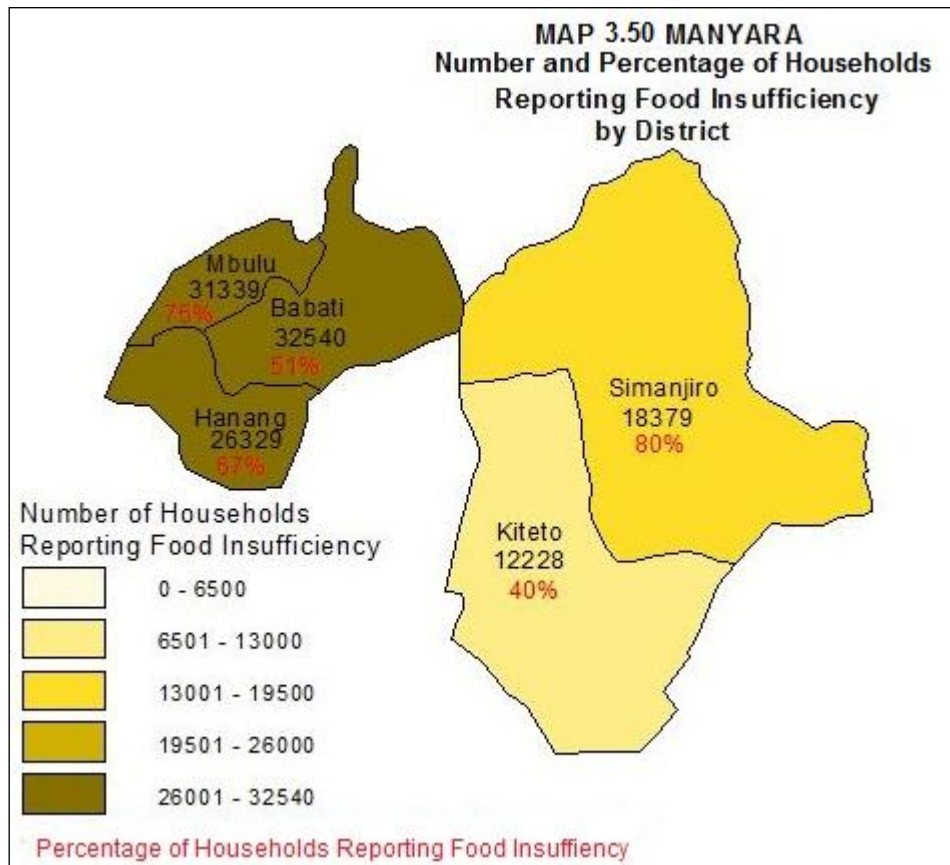
Simanjiro district has the highest percent of households (80% of the agricultural households) that often had problems with food sufficiency. The percentage of households with problems of meeting households food requirements is also higher in Mbulu, Hanang, and Babati with 75%, 67% and 51% respectively. Kiteto had the lowest percentage of households that always or often face food problems (40% of the agricultural households) (Map 3.50).

3.12.9 Main Sources of Cash Income

The main cash income for the households in Manyara region was from selling food crops (46 percent of smallholder households), followed by sales of livestock (14%), Casual earnings (12%), sale of cash crops (10%), business income (8%), and sale of livestock products (6%). Other sources were minor each accounting for less than five percent, they



include, in order of importance remittance (2%), cash (1%), and fishing, (Chart 3.100).



4 MANYARA PROFILES

This section presents the status of crops and livestock production, access to natural resources and services, demography and poverty for both the region as a whole and for each district.

4.1 Manyara Region Profile

The region profile provides a description of regional status of the Agriculture sector and makes a comparison of the same with other regions in the country.

Manyara has the second smallest number of agricultural households in the country at 198,513 households in relation to the number of crop growing households in other regions. Most of the crop growing households in the region also keep livestock. Normally, Manyara region has two rainy seasons, namely; the short rainy season (October to November) and the long rainy season (April to May).

The total area of land available to smallholders was 608,088 hectares. The regional average land area utilized for agriculture per household was only 3.1 hectares. This area is more than the national average which was estimated at 2.0 hectares.

About 86.4 percent of the total land available to smallholders was utilized and only 13.6 percent of the usable land available to smallholders was not used. The average areas planted per household during the short and long rainy seasons was 0.8 and 1.6 ha respectively

Maize dominated cereal crop production in Manyara region and had a planted area of 5 times greater than beans, which had the second largest planted area. The area planted with maize constitutes 66.8 percent of the total area planted with annual crops in the region

Paddy, sorghum, sunflower, pigeon peas, chick peas cassava and sweet potatoes were also reported in the region. There is moderate to low cultivation of fruits and vegetables in the region. The use of fertilisers on annual crops in Manyara region was very small with the application of fertilizers to a planted area of only 34,088 ha (8.1% of the total area planted with annual crops in the region).

The planted area with irrigation in Manyara region appears to have increased slightly over the period of 5 years from 6,736 hectares in 2002/03 to 7,347 hectares in 2007/08. Rivers, tap water, wells, canals and boreholes were the main source of water used for irrigation in the region.

Gravity was the most common means of obtaining water for irrigation with 81.4 percent of the households using this method followed by hand bucket and motor pump.

Most of the crop growing households in the region stored their produce in locally made traditional structures, sacks and/or open, improved locally made structures and unprotected piles

Manyara had the smallest number of households selling crops, the problem which was attributed to low market prices, long distance to the market, and lack of marketing information. Manyara had among the lowest percentage of smallholder households receiving extension advice in the country, and much of which was from the government, NGOs/Development projects and the mass media.

Cattle was the dominant livestock type in the region, followed by goats, sheep and pigs. The total number of cattle in the region was 1,662,452 equivalent to 7.8 percent of the total cattle population on Tanzania Mainland. As with other regions, in the country most of the cattle in the Manyara were indigenous. This was also the case for other livestock such as goats, sheep, pigs and chicken.

In Manyara region 35% of the total agricultural households in the region seldom experienced problems in satisfying the household food requirement, whilst 9% sometimes experienced problems; and only 11% often experienced food satisfaction problems in the census year was.

4.2 District Profiles

The following district profiles highlight the characteristics of each district and compare them in relation to population, main crops and livestock, production and productivity, access to services and resources and levels of poverty.

4.2.1 Babati

Babati district ranked first in terms of the number of households in the region and it was also the first in having the largest number of households involved in smallholder agriculture in the region. As is the case with other districts, most smallholders in Babati are involved in crop production

only, followed by livestock keeping/herding, fish farming and fishing. The number of households involved in Pastoralism is insignificant in the district.

Also, as with other districts, crop farming was the most important livelihood activity for smallholder households in Babati district, followed by livestock keeping/herding. Other activities were insignificant and they included fish farming and fishing.

Literacy rate among smallholder household members in Babati was the highest in the region accounting for 77 percent of the agricultural households in the region. Literacy rate for the head of households was also the highest in the region for both males and females accounting for 81 and 75 percents respectively. The utilized land area per household and planted land area per households were both the second lowest in the region by 1.38 and 1.31 hectares per household respectively. However, the proportion utilization available land area was the highest in the region accounting for 95 percent of land utilization. The district had second largest planted area per household at 3.9 ha/hh.

Babati district was the second highest in the production of cereal crops with maize being the major cereal in the district and which had a planted area of 57,685 hectares. Other cereal crops in the district in their order of importance include sorghum, which had the largest planted area and was the second most important crop; and paddy, which also had the largest planted area and was the third most important crop in the district. The district was also leading in the production of oilseeds led by sunflower which had the largest planted area (39,074 hectares, but the second highest in yields and the area per sunflower growing households at 0.5t/ha and 0.55ha/hh respectively.

The district was second highest in pulses production with beans as the major pulse crops with a planted area of 22.29 percent of the total planted area with the crop in the district. The major roots and tubers produced in the district were sweet potatoes and cassava both of which ranking second in terms of planted area and planted area per household in the region.

Fruits and vegetable produced in the district include tomatoes, ranking the first in the district in terms of area planted (84 percent of the planted area with tomatoes in the district) and onions also ranking second in terms of area planted with tomatoes (14.44%). Babati was the only district which

grew cotton in the region by 632 households accounting to 0.3 percent of the total annual crop growing households in the region.

The district had the second largest area under smallholder permanent crops accounting for 29.3% of the total area in the region. The major permanent crops in the district were banana, which had the highest percentage planted area of 65.51 percent, followed by pigeon peas, which also had the highest percentage planted area of 58.49 percent.

Sword and hand hoe were the most common equipment ranking second in terms of the number of smallholders using the equipment in the district. Draft animals particularly castrated and uncastrated bulls were the major methods in land cultivation.

Babati had the second highest planted area with improved seeds during dry season in Manyara region, and had the highest percentage in area planted with fertilizer, mostly organic fertilizer ranking first and inorganic fertilizer ranking second in the region. The district ranked second in the region in the use of insecticides, last in the use of herbicides and ranked second in the use of fungicides.

Babati had the largest area under irrigation of 2,573 626 hectares accounting for 35 percent. Lakes, wells, tap water, boreholes and rivers were the most common sources of water for irrigation, with hand buckets, hand pumps and gravity, in that order, being the major means of drawing water for irrigation. Babati district had the highest number of households which stored crops in the region accounting for 32.7 % of the households reported to store crops in the region. As is the case with other districts, locally made traditional structures were the dominant storage method and the district had the second highest percentage of households using the structure. Other methods were sacks and open drums which were moderately used in the district as compared to the use of the methods in other districts.

Babati district had the highest proportion of households reporting selling crops, however those who did not sell, attributed this to low price for agricultural produce, and long distance to the markets as major reasons. In Babati district both males and female headed households accessed agricultural credit, but the percentage was higher for the males than for females by 75 and 25 percent respectively. The main source of credit was cooperatives, commercial banks followed by savings

and credit societies. Those who did not use credit attributed this to inadequate knowledge of getting credit, unavailability of credit and fear of getting into debt.

A relatively moderate number of households received extension services in Babati district representing 16.4 percent, and the major provider of such services being the Government followed by Neighbours, NGOs/Development projects, Radio/Television/Newspaper, and large scale farms.

The district had the largest number of households with erosion control and water harvesting structures, most of which being terraces, drainage ditches, erosion control bunds, and water harvesting bunds, with a small number of drainage ditches, tree belts, and vetiver grass.

The region Cattle were the dominant livestock type in the region, followed by goats, sheep and pigs. The total number of cattle in the region was 1,662,452 equivalent to 7.8 percent of the total cattle population on Tanzania Mainland. The district had the largest number of cattle in the region all of which were indigenous type. It also had the largest number of goats, third largest number of sheep and pigs and the largest number of chicken. Other livestock reported in the district were donkeys, ducks, and rabbits in that order.

The district had the third highest percentage of households deworming cattle, the second highest in deworming goats and sheep and the third highest in deworming chicken. The district had the highest reported incidences of tick and moderate percentage reported incidence of tsetse problems in the region.

Honey production was also reported in the district with 46.1 percent of the total litters of honey (the highest in the region) being produced in the district.

As with other districts, a large number of households in Babati used traditional pit latrines followed by improved pit latrines, and flush toilets. The district had a comparatively small percentage (3.22%) of agricultural households in the district without toilet facilities. As with other district, the most important assets owned by most households in the district were Radios, bicycles, Mobile phones, irons, wheelbarrows, vehicles, television/video, landline phones, and refrigerators in that order.

Wick lamp was the most common source of energy for lighting in the district followed by hurricane lamp. Firewood was used for cooking in the district as was the case in other districts. Grass and leaves were the main roofing materials in the district used by 48 percent of the households, followed by iron sheet (47%). The percentage of households using other types of roofing materials was negligible. Drinking water was mostly provided by piped water and unprotected wells, and this was obtained from a distance of 1 to 2 kilometers.

The district had the highest percentage of households having three meals per day. It had the highest percentage of households who never experienced food shortages and the lowest percentage of those who always faced food insufficient in the census year.

4.2.2 Hanang

Hanang district had the third largest number of households in the region; also it had moderate percentage of households involved in smallholder agriculture in the region. Most smallholders were involved in crop farming only, followed by livestock keeping/herding, livestock pastoralist and fishing. No households were reported to be involved in fish farming activities.

Crop farming was the leading livelihood activity for smallholder households in Hanang. The second activity in importance was livestock keeping/herding, and fishing. The district had the third highest literacy rate among smallholder households, and also the third highest literacy rate for heads of households with male households heads having higher percentage than female household heads.

The usable area per household was the second highest ((1.5 ha/hh) after Kiteto and Simanjiro, but planted area was moderate with an estimated 2 hectares per household similar with Mbulu district.

Maize production dominates the production of cereal crops in the district, ranking second lowest in the region in terms of planted area (34,186 hectares) and planted area per household. The only other cereal crop produced in district was sorghum, which had the third planted area of 1,692 hectares. As is the case with Mbulu and Kiteto, paddy was not reported in Hanang district. The district was among the only three districts producing sunflower under oilseed crops and ranked third after Kiteto and Babati districts. However Hanang district had the smallest planted area of the crop in the region representing 0.79 percent of the total planted area and 0.10 planted area per sunflower growing household in the region.

Beans dominated the production of pulse crops across the districts and Hanang had the highest percentage of land planted with the crop representing 29.6% of the total land planted with the crop. Chick peas was the second most important pulse crop in the district and the district had the largest planted area and planted area per chick peas growing households in the region at 1,777 hectares and 1.5 hectares per household respectively.

Cassava and sweet potatoes were the major roots and tuber crops in Manyara region, but it was only cassava which reported to be produced in Hanang district. However the district recorded the second lowest planted area of only 99 ha, (10.3% of the cassava planted area in the region).

As for fruits and vegetables Hanang was among the only two districts where tomatoes are produced and second after Babati, in terms of planted area but the first in terms of planted area per tomatoes growing households at 1,584 hectares and 0.2 ha/hh respectively. The district was the highest in the percentage of planted area with onions and the proportion of land planted with onions.

As with other districts except Babati, Cotton and tobacco under annual crops were not produced in Hanang. The production of permanent crops was insignificant in Hanang district; and though it is the third highest in the percentage of planted area with pigeon peas and banana these crops account for only 22.96 percent and 3.55 percent of the total planted area with pigeon peas and banana respectively in the region. Production of fruits such as mangoes or oranges was not reported in the district.

Hanang had the second largest area planted with improved seed during the census year in Manyara region. The use of fertilizer in Hanang district, both organic and inorganic fertilizers, was slightly below moderate compared to other districts at only 15.5 percent and 14.7 percent respectively of the total area planted area in the region. Hanang district had the third highest percentage of planted area with insecticides the highest percentage of planted area with herbicides and the second highest planted area with fungicides.

Area of land under irrigation was moderate in the district with 1.7 percent of the total area under irrigation during the long rainy season. Well, tap water, boreholes and rivers were the main source of irrigation water, hand bucket, hand pump, and gravity were the main methods of drawing water for irrigation in the district

The district had the second largest number (20.8%) of the households reported storing crops, with locally made traditional structures and sacks and open drums as the most common method of crop storage in Hanang district. The district had a moderate number of households reported to be selling crops. As with other districts, those who did not sell crops attributed this problem to low market prices, long distance to the market and lack of market information. Hanang in the leading district with male household members receiving more agricultural credits than is the case for female household members in the region, by 87.5 percent and 12.5 percent respectively.. Cooperatives, savings and credit societies were the main agricultural credit providers in the district. Those who did not use agricultural credits attributed this problem to inadequate knowledge about credits, unavailability of the credits and fear for getting into debt.

Districts variation with respect to receiving extension services show that Hanang had the highest access to the services accounting for 17.4 percent of the household receiving the services in the region. As with other districts, the main providers of crop extension services were the government, neighbours, NGO/Development agencies, and the mass media (Radio/Television/Newspapers). Application of erosion control and water harvesting facilities in the district was rather moderate accounting for only 12 percent of household using the facilities. Terraces, erosion control bunds, drainage ditches, and water harvesting bunds were the main available facilities in the district.

As for livestock, the district had the second largest number of cattle, the lowest number of goats, the second largest number of sheep, the third largest number of pigs and the second largest number of chicken. All livestock found in the district comprise indigenous type. Other livestock found in the district include donkeys, ducks and rabbits, in that order.

Incidences of tick and tsetse problems were moderate in the district. However incidences of other problems in the district ranged from being the highest, Lympskin disease with 36 percent of the households experiencing the problem, to being the second highest, Newcastle disease (60%), to moderate, Foot and Mouth disease accounting for 14%.

Deworming of livestock was common for cattle, with the highest percentage of households, goats and sheep third highest, chicken the highest and pigs, third highest. Hanang district had the highest percentage of households with no toilet facilities. It had a moderate percentage of households using

wick and pressure lamps, and the lowest percentage of those using hurricane lamps and mains electricity as a source of lighting. The district is among the second highest with households using firewood, and had below moderate percentage of those using charcoal and had the lowest percentage of those using mains electricity a source of heating energy. The district among the districts with the highest percentage of households using grass and mud, and a moderate percentage of households using iron sheets and grass/leaves as roofing material.

Piped water was the main source of drinking water in the district, ranking first in the region. The district was among the three districts with the highest percentage of households having 3 meals per week, and had moderate percentage of households who ate meat and fish three times during the week prior to enumeration. The district had the highest proportion of households that seldom face food shortages.

4.2.3 Mbulu

Mbulu district had the second largest number of agricultural households and the second highest percentage of households involved in smallholder agriculture in the region. As is the case with other districts in the region, most smallholders were involved in crop production, followed by livestock keeping/herding. Livestock pastoralists, fishing and fish farming were negligible in Mbulu accounting for less than 1 percent of the total agricultural households' involved on the activity in the region.

Annual crop farming was the most important livelihood activity for smallholder households in Mbulu district, and this was followed by livestock keeping/herding. Compared with other districts in the region, Mbulu had the second highest percentage of literacy rate among the household members at 76%. The literacy rate for the heads of household was also the second highest and the rate between male and female household heads was almost equal in Mbulu district.

The land utilization in Mbulu was the lowest in the region at 1.1 hectares, but had a moderate utilization percentage of usable land per household. It has the least planted area per household (0.99ha) attributed to the high number of smallholders in the district.

Maize dominated the production of cereal crops in the district with a planted area of over 39799 ha, and the planted area per household of 0.51 ha/hh both of which were however among the lowest in

the region. Mbulu was among the three districts in the region which did not grow paddy, but had the second highest production of sorghum (2,124ha) accounting for 26 percent of the total land planted with sorghum in the region. The major oilseeds in the district were groundnuts, but the crop was however produced in small quantities and had the least reported production of sunflower under oilseeds production in the region.

The district had a moderate planted area of beans and chick peas accounting for 23.21 and 1.82 percents respectively of the total planted area for the two pulse crops in the region. The production of sweet potatoes in Mbulu was the highest in the region accounting for 75.7 percent of the total planted area of the crop under the production of roots and tubers crops. Cassava was produced in small quantities and had the smallest planted area accounting for only 10.1 percent of the total planted area with the crop. Vegetable production was not important in the district, as the district had the smallest planted area of onions and no reported production of tomatoes. Traditional crops (tobacco and cotton) were not grown in the district.

Permanent crops were not common in Mbulu district, except for banana which had the second largest planted area in the region (58.51% of the total permanent crop planted area in Manyara region). Other permanent crops were either not grown or were grown in very small quantities.

As with other districts in the region, most land clearing and preparation was done by hand hoe and sword, with ox-cart and cows being the most popular methods in soil preparation in the district. The use of inputs in the region was very small; however there were small variations across districts with Mbulu having the smallest area planted with improved seeds in Manyara region and this was due to the dominance of permanent crops which do not need frequent planting. Application of fertilizers especially organic was more frequent than inorganic fertilizers in the district. The district ranked second in the region in terms of planted area with organic fertilizers in the region. Mbulu district had the proportion of land applied with all the tree types of pesticides that is, insecticides, herbicides and fungicides. The district had the largest irrigated area only second to Babati accounting for 24.7 percent of the total planted area in the region. Canal and rivers were the most common source of water for irrigation, with gravity and hand bucket as the common methods of drawing irrigation water from the source.

Mbulu had the second largest number of households that stored crops, with locally made traditional structures, sacks and open drum as the commonly used storage methods. The district had the second highest percentage of households selling crops, and those who did not sell, attributed this problem low market prices, long distance from the market and inadequate market information as the main reasons. Comparatively, there was a moderate number of households who accessed agricultural credits, with male household members having more access to credit than was for female households members by 75 and 25 percents respectively. In Mbulu cooperatives, family and friends and private individuals were the main credit providers to agricultural smallholders. Those who did not use credits attributed this trend to inadequate knowledge of accessing credit, fear of getting into debt and unavailability of the credits.

A comparatively Mbulu had a fair percentage distribution of those receiving extension services in the region representing 14.5 percent, with the government, Large scale farms and NGOs/Development projects being the main provider of extension advice.

Mbulu ranked second having the highest proportion of households with erosion control and water harvesting structures, which were mainly in the form of terraces, erosion control bunds, drainage ditches, and tree belts in that order.

There was a moderate livestock production in the district involving cattle most of which were indigenous. Livestock production was also moderate for goats and sheep but highest for pigs and the third highest for all of which were indigenous type. And all improved chicken in the district were layers. Other livestock in the district include donkeys, turkeys, ducks and rabbits, in that order. Incidences of pests and parasites were severe for almost all types of livestock. A sizeable number of households reported tsetse fly and tick problems, with spraying reported as the most commonly used control method for both problems. Comparatively, the incidences of Newcastle disease, and Lymph skin disease were reported as being moderate, but foot and mouth disease as being severe making the district rank second in terms of the number of households reporting the problem.

Livestock extension services was also reported in the district with the government, neighbours, NGOs/Development projects, large scale farms and mass media being the biggest provider of the service to agricultural smallholders in the district.

Mbulu district had the lowest percent of households with no toilet facilities accounting for only 3.21 percent. And as for asset ownership, the district had a sizeable number of households owning radios, landlines, mobile, pressing iron, wheel barrow, television and vehicles in that order. The district had a moderate percentage of households using wick and hurricane lamps as a source of lighting energy. It also had a moderate percentage of households reporting using firewood, gas (biogas), and charcoal for cooking. The use of mains electricity in the district was nonexistence. Grass and mud was the most dependable roofing material in the district, followed by grass leaves. It had the smallest number of households using iron sheets for roofing in the region. Many households had access to drinking water within the distance of between 1 to 2 kilometer, with dams/spring/rivers, unprotected spring, piped water, and unprotected wells in that order, as the main source of drinking water.

The district had a moderate percentage (61%) of the households who reported having three meals per day and virtually no household reported having a meal once per day. The district had moderate percentages of households that ate meat or fish once, twice and thrice during the week prior to enumeration; however it had moderate percentages of households who never or seldom experience food insufficiency problems, but had the highest percentage of those who sometimes experience food dissatisfaction representing 16 % of the total households in the region.

4.2.4 Simanjiro

Simanjiro district had the second least number of households in the region and it had the least percent of households involved in smallholder agriculture in the region. As is the case with other districts, most smallholders in Simanjiro were involved in crop farming, followed by livestock keeping/herding. The district was leading in fishing and fish farming in the region although fish production for both was in still done in small quantities.

The most important livelihood activity for smallholder households in Simanjiro district was annual crop farming, followed by livestock keeping/herding. Simanjiro has a comparatively the lowest literacy rate for agricultural household members accounting for only 62 percent. The literacy rate for the heads of household was also the lowest for both male and female heads, but slightly higher for the male and was for the female heads; this was the common trend across all the districts in the region.

Land use variation across the district indicate Simanjiro as having the lowest utilization percentage of the usable land per household of 66%, but the highest land area utilization per household at an estimated of 4 ha/hh indicating a high level of land pressure in the district.

The total planted area is greater in the district than in other districts, but second largest to Kiteto district in the region due to the presence of good wet and dry seasons. Maize dominated cereal production in the district with a planted area of over 37,233 ha, thus, ranking third in the production of the crop in the region. Simanjiro was among the two districts which grow paddy with a planted area of 370 hectares. The production of other cereal involved mainly sorghum which was also in very small quantities representing only 16% of the total planted area with the crop. Simanjiro was among the districts that did not report production of oilseeds. The production of beans in Simanjiro was moderate compared to other districts in the region representing 22.15 percent of the total planted area, but had the largest area planted with beans per beans growing household of 1.4 ha/hh.

Similarly, cassava dominated the production of roots and tubers and which had the largest planted area accounting for 48.3 percent of the total planted area with the crop. Vegetable production was less important in the district. Traditional cash crops (e.g. tobacco and cotton) were not grown in the district.

Compared to other districts in the region, Simanjiro had the smallest area planted with permanent crops which were dominated by pigeon peas (5.92% of the total planted area), and banana (1.25% of the total planted area). Other permanent crops were either not grown or are grown in very small quantities. As with other districts in the region, most land clearing was done by hand hoe and sword, however slightly more land clearing was done by tractors and uncastrated bulls. Cows and donkeys were the most common methods for land preparation in Simanjiro.

The use of inputs in was very small the region, however the existing variation indicate Simanjiro as having the second largest area planted with improved seeds in Manyara region. The district had the smallest area planted with organic fertilizers, but had the largest area planted with inorganic fertilize accounting for 1.7 percent and 75 percent respectively of the total planted area with fertilizers in the region. The application of pesticides in the district varied depending on the type, thus it had the second largest proportion of planted area with insecticides and herbicides, but the

largest proportion of planted area with fungicides. It had the third largest irrigated area in the region accounting for 22.6% of the total irrigated land in the region. The most common source of water for irrigation was rivers and tape water, using gravity as the means of drawing the water from the source.

Simanjiro had the smallest number of households reporting storing crops, thus the proportion of households not storing crops was the highest in the region. As is the case with other districts, the most common method of crop storage was the locally made traditional structures, sacks and open drums. The district had the lowest number of households selling crops; this was concomitant with having the lowest crop storage rate in the district. However those who did not sell crops attributed this trend to low market prices, long distances to the market, lack of market information and transport as the main reasons.

Although very small, access to credit in the district was to both male and female household members, but with male having higher access than was the case for females in the district, a common trend across all the districts except Kiteto district. Cooperatives and savings and credit societies were the main sources of credit in the district. Those who did not use agricultural credits attributed this trend to lack of information about credits, unavailability, and fear of getting into debt as the main reasons. Comparatively a very small proportion of households receive extension services in Simanjiro and much of which comes from the government. Simanjiro had the second lowest proportion of households with soil erosion control and water harvesting facilities, which were mainly in the form of erosion control bunds, terraces and drainage ditches.

The district has the third largest number of cattle in the region and most of them were indigenous. It had the second largest population of goats, the largest population of sheep, the second lowest population of pigs and chicken. Other types of livestock were donkeys and ducks, the remaining types of livestock were either negligible or nonexistent.

The district reported the predominance of tick related diseases over tsetse related diseases. The district had largest number of households deworming livestock particularly goats and sheep, and moderate number of households deworming cattle, and the smallest number deworming pig, and chicken. The district reported highest incidences of Foot and Mouth disease, the second highest incidences of Lymphskin disease and the lowest incidences of Newcastle Disease.

Simanjiro district had the highest percent of households with no toilet facilities (53.6 %) but it had the second largest number of households using mains electricity in the region. The most common source of energy for lighting was the wick lamp, hurricane lamp, gas (biogas), pressure lamp and main electricity, in that order. Firewood was the main source of cooking, followed by Charcoal

The district had the highest percentage of households using grass leaves and a moderate percentage of households using iron sheets for roofing. As is the case with other districts, The most common distance from the source of drinking water was between 1 and 2 km, with dams/rivers, protected wells, piped water and uncovered rainwater catchments as the main source of drinking water. It had the highest percent of households having three meals per day. Simanjiro is the only district with the highest percentage of those reported to have eaten meat and fish more than five times during the week prior to enumeration, however it had the highest percentage of households who often and always experience problems with food satisfaction.

4.2.5 Kiteto

Kiteto district had the second largest number of agricultural households in the region and it had the highest percentage of households involved in smallholder agriculture in the region. Most smallholders were involved in crop production, followed livestock keeping/herding, livestock pastoralist and fishing.

Annual crop farming was the most important livelihood activity for smallholder households in Kiteto district, followed by livestock keeping. Kiteto had the second lowest among smallholder households. The literacy rate for the heads of household was among the lowest with male household heads having slightly higher literacy than is the case with female household heads.

It has a moderate utilized land area per household (3.63ha) and 86 percent of the allocated area is currently being utilised. The district has the largest planted area in the region (132,171 ha) and the largest planted area per household ((3.14ha/hh).

Maize dominated the production of cereal crops in Kiteto, with a planted area of 96,260 hectares which is the largest in the region. The planted area per household was also the highest in the region at 3.32 ha per household. Paddy was not produced in the district, and sorghum was produced in small quantities. Sunflower was the most important oilseed crop in the district and ranked second in

terms of planted area of the crop after Babati. Other oilseeds crops were either negligible or nonexistent. Although produced in the smallest quantities in the region, beans were the only pulse crop reported in the district.

The production of roots and tuber crops, particularly cassava and sweet potatoes was not reported in the district. Vegetable production was not important in the district and traditional cash crops (e.g. tobacco and cotton) were not grown

Kiteto had the third highest percentage (28.21) of planted area, and the highest percentage planted area per household with permanent crops, and which were dominated by pigeon peas (14.52%). Other permanent crops were either not grown or were grown in very small quantities.

As was the case with other districts in the region, most land clearing and preparation was done by hand hoe and sword, however a very small amount of land preparation was done by oxen and tractor. Castrated and uncastrated bulls were also instrumental in land preparation in the district.

The use of inputs in the region was very small, and Kiteto had no reported application of improved seeds in the region. The district had the smallest area planted with the application of fertilizers and most of these were organic fertilizers. Compared to other districts in the region, Kiteto had the highest percentage of the planted area with insecticides (27.6% of the total planted area with pesticides), and the lowest percentage of the planted area with fungicides (1.5 %). The application of herbicides was either insignificant or nonexistent in Kiteto. Irrigation was not reported in applied Kiteto district as was the case in Hanang district.

Crop storage and marketing were not reported in Kiteto district. Access to agricultural credits was reported in the district, and was the only district which female household members had more access to agricultural credits than was the case for male household members, by 69.% and 30.8% of the total female and male household members respectively who accessed credits in the district. Commercial banks, savings and credit societies, and cooperatives and private individuals were the main source of agricultural credits to agricultural smallholders in the district. As is the case with other districts, those who did no access credits in the district, attributed this trend to lack of knowledge of accessing credits, unavailability of the credits, and fear of getting into debts as the main reasons.

Kiteto had the second lowest percentage of smallholders who accessed crop extension advice with the government, mass media and large scale farms as the main source of extension advice.

The proportion of households with soil erosion control and water harvesting facilities was smallest in Kiteto (5%). Most of these facilities were in the form terraces, drainage ditches, erosion control bunds, and water harvesting bunds.

The district had the smallest number of cattle, second smallest population of goats, and the smallest number of sheep, pigs, and chicken in the region and most of these were indigenous. Other types of livestock found in the district include donkey, ducks, and guinea pigs, in that order.

The district had the lowest percentage of the reported incidences of ticks and tsetse problems. It also had the second lowest incidences of Newcastle Disease, and the lowest incidences of Foot and Mouth Disease and well as Lymphskin Disease. Livestock extension advice was also reported in the district with the government, NGOs/Development projects and neighbours as the main providers of extension advice to agricultural smallholders.

The district had the second largest number of households without toilet facilities, and had also the second smallest number of households with improved pit latrines. Wick lamp, hurricane lamp and pressure lamp were the main source of lighting energy, and had the second smallest number of households using mains electricity as the main source of lighting energy. Virtually everybody used firewood followed by charcoal as the main source of cooking energy. Mains electricity was not reported as a source of heating energy.

The district had the highest percentage of households using iron sheets for roofing and moderate percentage of those using grass and mud, and the lowest percentage of those using grass leaves as roofing materials. Most households reported access to drinking water within a distance of between 1 and 2 km, with piped water, unprotected springs, dams and rivers as the main source of drinking water in the district.

It had the highest percentage of households reported to eat 2 meals per day, and among the districts whose households ate three meals per day. it had moderate percentage of households that ate meat and fish over three times during the week prior to enumeration. Kiteto had the highest percentage

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TYPE OF AGRICULTURE HOUSEHOLD

Appendix II: TABLES**2.1. Number and Percentage of Households by type of Household and District during 2007/08 Agriculture year**

District	Rural Households involved in Agriculture	% of Total Rural Households	Rural households NOT involved in Agriculture	% of Total Rural Households	Total Rural Households	% of Total Households	Number of Urban Households	% of Total Households	Total Number of Households
Babati	63,816	99.7	170	0.3	63,986	14.0	391,696	85.96	455,682
Hanang	39,494	97.2	1,126	2.8	40,620	11.4	316,198	88.6	356,818
Mbulu	41,889	99.6	159	0.4	42,048	12.1	306,618	87.9	348,667
Simanjiro	23,117	84.6	4,195	15.4	27,312	6.5	390,466	93.5	417,778
Kiteto	30,196	99.3	209	0.7	30,405	6.6	429,140	93.4	459,545
Total	198,513	97.1	5,859	2.9	204,372	10.0	1834118	90.0	2,038,490

2.2 Number and Percentage of Agricultural Households by type of Holding by District during 2007/08 Agriculture year

District	Crops Only		Livestock Only		Pastoralist		Crops & Livestock		Total Number of Households	Total Number of Households Growing Crops	Total Number of Households Rearing Livestock
	Number of households	%	Number of households	%	Number of households	%	Number of households	%			
Babati	20,377	32	316	0	0	0	43,123	68	63,816	63,500	43,439
Hanang	7,119	18	0	0	0	0	32,375	82	39,494	39,494	32,375
Mbulu	7,550	18	207	0	0	0	34,132	81	41,889	41,683	34,339
Simanjiro	4,167	18	3,881	17	0	0	15,069	65	23,117	19,236	18,950
Kiteto	21,398	71	820	3	0	0	7,978	26	30,196	29,376	8,798
Total	60,611	31	5,224	3	0	0	132,677	67	198,513	193,288	137,902

2.3 Number and Percentage of Agricultural Households By Type and Size of Holding, 2007/08 Agricultural Year

Size of Holding	2.1 Type of Agriculture Household									
	Crops only		Livestock only		Pastoralist		Crops and Livestock		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0.01 - 0.50	11,002	43	3,706	14	0	0.0	11,153	43	25,861	100
0.51 - 1.00	11,971	37	724	2	0	0.0	19,575	61	32,271	100
1.01 - 1.50	8,938	28	114	0	0	0.0	22,705	71	31,757	100
1.51 - 2.00	5,980	27	0	0	0	0.0	16,116	73	22,095	100
2.01 - 2.50	7,883	29	114	0	0	0.0	18,889	70	26,886	100
2.51 - 3.00	1,962	25	149	2	0	0.0	5,783	73	7,894	100
3.01 - 3.50	2,125	27	114	1	0	0.0	5,766	72	8,005	100
3.51 - 4.00	763	22	0	0	0	0.0	2,681	78	3,444	100
4.01 -4.50	3,744	29	114	1	0	0.0	9,199	70	13,058	100
4.51 -5.00	849	26	57	2	0	0.0	2,301	72	3,207	100
Above 5	5,393	22	132	1	0	0.0	18,509	77	24,034	100
Total	60,611	31	5,224	3	0	0.0	132,677	67	198,513	100

2.4 Number of Agricultural Households By Type and Size of Holding, 2007/08 Agricultural Year

Size of Holding	2.1 Type of Agriculture Household									
	Crops only		Livestock only		Pastoralist		Crops and Livestock		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0.01 - 0.50	11,002	18	3,706	71	0	0.0	11,153	8	25,861	13
0.51 - 1.00	11,971	20	724	14	0	0.0	19,575	15	32,271	16
1.01 - 1.50	8,938	15	114	2	0	0.0	22,705	17	31,757	16
1.51 - 2.00	5,980	10	0	0	0	0.0	16,116	12	22,095	11
2.01 - 2.50	7,883	13	114	2	0	0.0	18,889	14	26,886	14
2.51 - 3.00	1,962	3	149	3	0	0.0	5,783	4	7,894	4
3.01 - 3.50	2,125	4	114	2	0	0.0	5,766	4	8,005	4
3.51 - 4.00	763	1	0	0	0	0.0	2,681	2	3,444	2
4.01 -4.50	3,744	6	114	2	0	0.0	9,199	7	13,058	7
4.51 -5.00	849	1	57	1	0	0.0	2,301	2	3,207	2
Above 5	5,393	9	132	3	0	0.0	18,509	14	24,034	12
Total	60,611	100	5,224	100	0	0.0	132,677	100	198,513	100

HOUSEHOLD DEMOGRAPHICS

3.1 Number and Percentage of Heads of Agricultural Households by sex of head and District, 2007/08 Agricultural Year

District	Male		Female		Total
	Number	Percent	Number	Percent	
Babati	54,338	85	9,478	15	63,816
Hanang	36,569	93	2,925	7	39,494
Mbulu	39,511	94	2,379	6	41,889
Simanjiro	17,637	76	5,480	24	23,117
Kiteto	24,306	80	5,890	20	30,196
Total	172,361	87	26,152	13	198,513

3.2 Number and Percentage of Household Members classified by District and Sex

District	Male		Female		Total
	Number	Percent	Number	Percent	
Babati	186,710	52	169,492	48	356,201
Hanang	135,255	53	117,897	47	253,152
Mbulu	145,217	52	133,115	48	278,332
Simanjiro	60,846	53	54,624	47	115,470
Kiteto	75,826	49	79,852	51	155,678
Total	603,853	52	554,980	48	1,158,833

**3.3: Number and Percentage of Agricultural Household Members By Sex and Age Group,
2007/08 Agricultural Year, Manyara Region**

Age Group	Sex					
	Male		Female		Total	
	Number	%	Number	%	Number	%
Less than 4	79,430	51	77,780	49	157,210	100
5 - 9	93,990	53	82,477	47	176,468	100
10 - 14	95,324	54	80,421	46	175,744	100
15 - 19	72,706	51	69,752	49	142,458	100
20 - 24	46,920	50	46,853	50	93,773	100
25 - 29	37,158	47	42,740	53	79,897	100
30 - 34	31,103	49	32,788	51	63,891	100
35 - 39	32,869	49	34,092	51	66,961	100
40 - 44	25,610	55	20,602	45	46,212	100
45 - 49	26,639	59	18,464	41	45,103	100
50 - 54	16,137	57	12,050	43	28,187	100
55 - 59	10,407	53	9,364	47	19,771	100
60 - 64	10,177	56	7,890	44	18,066	100
65 - 69	7,380	57	5,458	43	12,837	100
70 - 74	5,540	49	5,694	51	11,234	100
75 - 79	5,062	68	2,354	32	7,416	100
80 - 84	2,723	60	1,779	40	4,502	100
Above 85	4,679	51	4,423	49	9,102	100
Total	603,853	52	554,980	48	1,158,833	100

3.4 Number of Heads of Agricultural Households by Marital Status, sex of head and District, 2007/08 Agricultural Year

District	Married						Not Married					
	Male		Female		Total		Male		Female		Total	
Babati	50,232	95		5	53,075	100	2,053	76	632	24	2,685	100
Hanang	35,203	97	1,073	3	36,276	100	780	100	0	0	780	100
Mbulu	34,132	97	931	3	35,063	100	621	60	414	40	1,034	100
Simanjiro	16,496	84	3,196	16	19,692	100	514	53	457	47	970	100
Kiteto	22,293	91	2,088	9	24,381	100	1,267	77	373	23	1,640	100
Total	158,356	94	10,131	6	168,487	100	5,235	74	1,875	26	7,110	100

Cont 3.4 Number of Heads of Agricultural Households by Marital Status, sex of head and District, 2007/08 Agricultural Year

District	Living together						Separated					
	Male		Female		Total		Male		Female		Total	
Babati	0	0	0	0	0	0	1,264	33	2,527	67	3,791	100
Hanang	0	0	0	0	0	0	195	33	390	67	585	100
Mbulu	3,517	100	0	0	3,517	100	310	60	207	40	517	100
Simanjiro	0	0	114	100	114	100	285	45	342	55	628	100
Kiteto	0	0	224	100	224	100	746	30	1,715	70	2,460	100
Total	3,517	91	338	9	3,854	100	2,800	35	5,182	65	7,982	100

Cont. 3.4 Number of Heads of Agricultural Households by Marital Status, sex of head and District, 2007/08 Agricultural Year

District	Widowed						Total					
	Male		Female		Total		Male		Female		Total	
Babati	790	19	3,475	81	4,265	100	54,338	85	9,478	15	63,816	100
Hanang	390	21	1,463	79	1,853	100	36,569	93	2,925	7	39,494	100
Mbulu	931	53	827	47	1,758	100	39,511	94	2,379	6	41,889	100
Simanjiro	342	20	1,370	80	1,712	100	17,637	76	5,480	24	23,117	100
Kiteto	0	0	1,491	100	1,491	100	24,306	80	5,890	20	30,196	100
Total	2,453	22	8,626	78	11,080	100	172,361	87	26,152	13	198,513	100

3.5: Number of Heads of Agricultural Households by Survival of Female Parent, Sex of Head and District, 2007/08 Agricultural Year

District	Yes						No					
	Male		Female		Total		Male		Female		Total	
Babati	26,064	89	3,317	11	29,381	100	28,275	82	6,160	18	34,435	100
Hanang	18,040	94	1,170	6	19,211	100	18,528	91	1,755	9	20,283	100
Mbulu	18,514	96	827	4	19,342	100	20,996	93	1,551	7	22,548	100
Simanjiro	8,904	78	2,569	22	11,473	100	8,676	75	2,911	25	11,587	100
Kiteto	11,258	81	2,684	19	13,942	100	12,973	80	3,206	20	16,179	100
Total	82,781	89	10,567	11	93,348	100	89,449	85	15,584	15	105,033	100

3.6 Number of Heads of Agricultural Households by Survival of Female Parent, Sex of Head and District, 2007/08 Agricultural Year

District	Don't know						Total					
	Male		Female		Total		Male		Female		Total	
Babati	0	0	0	0	0	0	54,338	85	9,478	15	63,816	100
Hanang	0	0	0	0	0	0	36,569	93	2,925	7	39,494	100
Mbulu	0	0	0	0	0	0	39,511	94	2,379	6	41,889	100
Simanjiro	57	100	0	0	57	100	17,637	76	5,480	24	23,117	100
Kiteto	75	100	0	0	75	100	24,306	80	5,890	20	30,196	100
Total	132	100	0	0	132	100	172,361	87	26,152	13	198,513	100

3.7: Number and Percentage of Heads of Agricultural Households by Survival of Male Parent, Sex of Head and District,, 2007/08 Agricultural Year

District	Yes						No					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Babati	34,277	89	4,107	11	38,384	100	20,061	79	5,371	21	25,432	100
Hanang	24,477	94	1,560	6	26,037	100	12,092	90	1,365	10	13,457	100
Mbulu	25,341	95	1,448	5	26,789	100	14,170	94	931	6	15,101	100
Simanjiro	12,786	78	3,710	22	16,496	100	4,795	73	1,769	27	6,564	100
Kiteto	16,627	82	3,579	18	20,205	100	7,680	77	2,311	23	9,991	100
Total	113,507	89	14,404	11	127,911	100	58,797	83	11,748	17	70,545	100

Cont. 3.7 Number and Percentage of Heads of Agricultural Households by Survival of Male Parent, sex of head and District,, 2007/08 Agricultural Year

District	Don't know						Total					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Babati	0	0	0	0	0	0	54,338	85	9,478	15	63,816	100
Hanang	0	0	0	0	0	0	36,569	93	2,925	7	39,494	100
Mbulu	0	0	0	0	0	0	39,511	94	2,379	6	41,889	100
Simanjiro	57	100	0	0	57	100	17,637	76	5,480	24	23,117	100
Kiteto	0	0	0	0	0	0	24,306	80	5,890	20	30,196	100
Total	57	100	0	0	57	100	172,361	87	26,152	13	198,513	100

3.8: Number and Percentage of Household Members Who Can Read and Write languages by type of language and region

District	Swahili		Swahili & English		Any Other Language		Don't Read / Write		Total
	Number	%	Number	%	Number	%	Number	%	
Babati	211,667	67	30,170	10	316	0.1	73,452	23.3	315,605
Hanang	139,058	64	14,042	6	98	0.0	64,263	29.6	217,461
Mbulu	170,867	71	14,170	6	103	0.0	57,094	23.6	242,235
Simanjiro	53,197	55	6,564	7	57	0.1	37,444	38.5	97,262
Kiteto	76,199	59	6,412	5	298	0.2	46,152	35.8	129,061
Total	650,989	65.0	71,359	7.1	872	0.1	278,404	27.8	1,001,624

3.9: Number and Percentage of Heads of Agricultural Households By Status of writing and reading Languages, sex of head and District, 2007/08
Agricultural Year

District	Swahili						Swahili & English					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Babati	40,280	92	3,475	8	43,755	100	3,791	89	474	11	4,265	100
Hanang	23,404	94	1,463	6	24,867	100	1,268	100	0	0	1,268	100
Mbulu	27,926	96	1,138	4	29,064	100	931	90	103	10	1,034	100
Simanjiro	10,560	86	1,712	14	12,272	100	742	81	171	19	913	100
Kiteto	14,912	86	2,460	14	17,372	100	895	100	0	0	895	100
Total	117,081	92	10,248	8	127,330	100	7,626	91	749	9	8,375	100

Cont. 3.9 Number and Percentage of Heads of Agricultural Households By Status of writing and reading Languages, sex of head and District, 2007/08
Agricultural Year

District	Any Other Language						Don't Read / Write					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Babati	0	0	0	0	0	0	10,267	65	5,529	35	15,796	100
Hanang	0	0	0	0	0	0	11,897	89	1,463	11	13,360	100
Mbulu	0	0	0	0	0	0	10,653	90	1,138	10	11,791	100
Simanjiro	0	0	0	0	0	0	6,336	64	3,596	36	9,932	100
Kiteto	75	100	0	0	75	100	8,425	71	3,430	29	11,855	100
Total	75	100	0	0	75	100	47,579	76	15,155	24	62,733	100

Cont. 3.9 Number and Percentage of Heads of Agricultural Households By Status of writing and reading Languages, sex of head and District, 2007/08 Agricultural Year

District	Total					
	Male	%	Female	%	Total	%
Babati	54,338	85	9,478	15	63,816	100
Hanang	36,569	93	2,925	7	39,494	100
Mbulu	39,511	94	2,379	6	41,889	100
Simanjiro	17,637	76	5,480	24	23,117	100
Kiteto	24,306	80	5,890	20	30,196	100
Total	172,361	87	26,152	13	198,513	100

3.10: Number and Percentage of Agricultural Household Members reporting Literacy levels by Sex of Member and District, 2007/08 Agricultural Year

District	Male						Female						Total					
	Can Read and Write		Can not Read and Write		Total		Can Read and Write		Can not Read and Write		Total		Can Read and Write		Can not Read and Write		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	132,845	80	33,488	20	166,333	100	109,309	73	39,964	27	149,273	100	242,154	77	73,452	23	315,605	100
Hanang	83,571	71	33,741	29	117,312	100	69,626	70	30,523	30	100,149	100	153,198	70	64,263	30	217,461	100
Mbulu	97,742	77	28,857	23	126,599	100	87,399	76	28,237	24	115,635	100	185,141	76	57,094	24	242,235	100
Simanjiro	34,476	68	16,553	32	51,028	100	25,343	55	20,891	45	46,234	100	59,818	62	37,444	38	97,262	100
Kiteto	42,349	67	20,802	33	63,151	100	40,560	62	25,350	38	65,910	100	82,909	64	46,152	36	129,061	100
Total	390,983	75	133,440	25	524,423	100	332,237	70	144,964	30	477,201	100	723,220	72	278,404	28	1,001,624	100

3.11: Number and Percentage of heads of Agricultural households reporting Literacy levels by Sex of Member and District, 2007/08 Agricultural Year

District	Male						Female						Total					
	Can Read and Write		Can not Read and Write		Total		Can Read and Write		Can not Read and Write		Total		Can Read and Write		Can not Read and Write		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	44,071	81	10,267	19	54,338	100	3,949	42	5,529	58	9,478	100	48,020	75	15,796	25	63,816	100
Hanang	24,672	67	11,897	33	36,569	100	1,463	50	1,463	50	2,925	100	26,134	66	13,360	34	39,494	100
Mbulu	28,857	73	10,653	27	39,511	100	1,241	52	1,138	48	2,379	100	30,098	72	11,791	28	41,889	100
Simanjiro	11,302	64	6,336	36	17,637	100	1,884	34	3,596	66	5,480	100	13,185	57	9,932	43	23,117	100
Kiteto	15,881	65	8,425	35	24,306	100	2,460	42	3,430	58	5,890	100	18,341	61	11,855	39	30,196	100
Total	124,782	72	47,579	28	172,361	100	10,997	42	15,155	58	26,152	100	135,779	68	62,733	32	198,513	100

3.12: Number and Percentage of Household Members Five Years and Above by Education Status and District

District	Attending School	%	Completed	%	Never Attended to School	%	Total
Babati	114,364	36	130,791	41	70,450	22	315,605
Hanang	77,915	36	78,403	36	61,143	28	217,461
Mbulu	97,949	40	92,053	38	52,232	22	242,235
Simanjiro	30,994	32	30,880	32	35,389	36	97,262
Kiteto	40,709	32	43,393	34	44,959	35	129,061
Total	361,930	36	375,520	36	264,173	26	1,001,624

3.13: Number and Percentage of Heads of Agricultural Households by Education Status, sex of head and District,, 2007/08 Agricultural Year

District	Attending School						Completed					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Babati	632	100	0	0	632	100	43,281	92	3,949	8	47,230	100
Hanang	195	100	0	0	195	100	24,184	94	1,463	6	25,647	100
Mbulu	1,758	100	0	0	1,758	100	27,616	96	1,138	4	28,754	100
Simanjiro	228	100	0	0	228	100	10,959	86	1,827	14	12,786	100
Kiteto	373	100	0	0	373	100	15,583	87	2,386	13	17,969	100
Total	3,186	100	0	0	3,186	100	121,623	92	10,762	8	132,385	100

3.14 Number and Percentage of Heads of Agricultural Households by Education Status, sex of head and District,, 2007/08 Agricultural Year

District	Never Attended to School						Total					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Babati	10,425	65	5,529	35	15,954	100	54,338	85	9,478	15	63,816	100
Hanang	12,190	89	1,463	11	13,652	100	36,569	93	2,925	7	39,494	100
Mbulu	10,136	89	1,241	11	11,377	100	39,511	94	2,379	6	41,889	100
Simanjiro	6,450	64	3,653	36	10,103	100	17,637	76	5,480	24	23,117	100
Kiteto	8,351	70	3,504	30	11,855	100	24,306	80	5,890	20	30,196	100
Total	47,552	76	15,390	24	62,941	100	172,361	87	26,152	13	198,513	100

3.15: Number and Percentage of Agricultural Household Members By Level of Formal Education Completion and District, 2007/08 Agricultural Year

District	Education Level											
	Under Standard One		Standard One		Standard Two		Standard Three		Standard Four		Standard Five	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	158	0	632	0	1,422	1	2,369	2	9,004	7	1,580	1
Hanang	195	0	390	0	293	0	1,853	2	4,973	6	1,268	2
Mbulu	207	0	414	0	827	1	1,034	1	4,861	5	1,345	1
Simanjiro	0	0	57	0	285	1	457	1	1,027	3	400	1
Kiteto	0	0	298	1	671	2	820	2	2,237	5	746	2
Total	560	0.1	1,791	0.5	3,498	0.9	6,533	1.7	22,102	5.9	5,337	1.4

cont 3.15: Number of Agricultural Household Members By Level of Formal Education Completion and District, 2007/08 Agricultural Year

District	Education Level											
	Standard Six		Standard Seven		Standard Eight		Training After Primary Education		Pre Form One		Form One	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	1,738	1	104,254	80	632	0	474	0	474	0	158	0
Hanang	1,853	2	62,995	80	293	0	390	0	0	0	195	0
Mbulu	1,345	1	75,194	82	517	1	207	0	0	0	0	0
Simanjiro	457	1	25,058	81	57	0	171	1	0	0	114	0
Kiteto	522	1	35,713	82	0	0	75	0	0	0	149	0
Total	5,914	1.6	303,215	80.7	1,499	0.4	1,317	0.4	474	0.1	616	0.2

cont 3.15: Number of Agricultural Household Members By Level of Formal Education Completion and Region, 2007/08 Agricultural Year

District	Education Level											
	Form Two		Form Three		Form Four		Form Five		Form Six		Training After Secondary Education	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	1,422	1	632	0	3,159	2	0	0.0	158	0	5,529	0.2
Hanang	390	0	195	0	1,755	2	0	0.0	195	0	2,730	0.7
Mbulu	621	1	103	0	1,655	2	0	0.0	310	0	2,689	1.1
Simanjiro	571	2	342	1	1,199	4	0	0.0	114	0	2,340	0.3
Kiteto	298	1	0	0	895	2	0	0.0	0	0	1,342	0.4
Total	3,301	0.9	1,273	0.3	8,663	2.3	0	0.0	777	0.2	1,616	0.4

cont 3.15: Number of Agricultural Household Members By Level of Formal Education Completion and District, 2007/08 Agricultural Year

District	Education Level							
	University & Other Tertiary Education		Adult Education		Not applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Babati	158	0	1,264	1	316	0	130,791	100
Hanang	0	0	585	1	390	0	78,403	100
Mbulu	310	0	2,172	2	414	0	92,053	100
Simanjiro	57	0	285	1	114	0	30,880	100
Kiteto	75	0	671	2	224	1	43,393	100
Total	600	0.2	4,977	1.3	1,458	0.4	375,520	100

3.16: Number and Percentage of Agricultural Household Members By Level of involvement in Farming Activivty and District Region, 2007/08 Agricultural Year

District	Involvement in Farming									
	Works Full-time on Farm		Works Part-time on Farm		Rarely Works on Farm		Never Works on Farm		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	128,580	41	14,690	5	82,929	26	89,406	28	315,605	100
Hanang	98,979	46	6,436	3	42,810	20	69,236	32	217,461	100
Mbulu	113,257	47	7,861	3	40,545	17	80,572	33	242,235	100
Simanjiro	36,759	38	8,619	9	16,724	17	35,160	36	97,262	100
Kiteto	61,511	48	6,039	5	17,372	13	44,139	34	129,061	100
Total	439,085	44	43,645	4	200,380	20	318,514	32	1,001,624	100

LAND OWNERSHIP AND LAND USE

4.1: Number and Percentage of Farming households by type of land Ownership/Tenure and District for the 2007/08 Agriculture year- Manyara Region

Region	Land ownership/tenure														Total number of households
	Leased / Certificate of Ownership		Owned under Customary Law		Bought		Rented		Borrowed		Households with area Share - cropped		Households with area under Other forms of Tenure		
	No of Households	%	No of Households	%	No of Households	%	No of Households	%	No of Households	%	No of Households	%	No of Households	%	
Babati	10,899	12.2	46,598	52.2	17,218	19.3	10,109	11.3	2,211	2.5	474	0.5	1,738	1.9	89,248
Hanang	5,656	11.2	30,815	61.0	5,558	11.0	4,193	8.3	1,463	2.9	683	1.4	2,145	4.2	50,513
Mbulu	2,793	5.9	38,890	82.8	1,758	3.7	1,655	3.5	1,241	2.6	414	0.9	207	0.4	46,958
Simanjiro	6,164	26.5	13,413	57.6	1,427	6.1	856	3.7	970	4.2	342	1.5	114	0.5	23,288
Kiteto	596	1.8	21,398	62.9	3,281	9.6	5,666	16.7	1,118	3.3	1,193	3.5	746	2.2	33,999
Total	26,109	13.2	151,115	76.1	29,242	14.7	22,480	11.3	7,004	3.5	3,106	1.6	4,950	2.5	198,513

4.2: Area of land (ha) by Ownership/Tenure and District for the 2007/08 Agriculture year- Manyara Region

District	Land Ownership/Tenure							Total area
	Area leased / Certificate of Ownership	Area owned under Customary Law	Area Bought	Area rented	Area Borrowed	Area Share - cropped	Area under Other forms of Tenure	
Babati	17,267	74,242	24,685	13,814	1,423	256	1,759	133,445
Hanang	10,053	71,618	11,242	4,747	928	543	4,861	103,993
Mbulu	6,072	83,404	2,722	1,089	806	1,382	94	95,569
Simanjiro	42,555	70,833	3,963	1,040	2,161	705	693	121,950
Kiteto	5,192	98,251	20,979	15,849	2,596	4,830	5,436	153,132
Total	81,138	398,348	63,591	36,539	7,913	7,715	12,843	608,088
Percent	13.3	65.5	10.5	6.0	1.3	1.3	2.1	100.0

4.3: Number and Percentage of Agricultural Households by Whether All Land Available to the Household Was Used during 2007/08 agriculture year and District

District	Was all Land Available to the Hh Used During 2007/08?				
	Yes	%	No	%	Total
Babati	52,917	83	10,899	17	63,816
Hanang	31,595	80	7,899	20	39,494
Mbulu	32,684	78	9,205	22	41,889
Simanjiro	10,788	47	12,329	53	23,117
Kiteto	23,635	78	6,561	22	30,196
Total	151,619	76	46,894	24	198,513

4.4: Number and Percentage of Agricultural Households by Whether they Consider Having Sufficient Land for the Household and District during 2007/08 agriculture year

District	Do you Consider that you have sufficient land for the Hh?				
	Yes	%	No	%	Total
Babati	11,531	18	52,285	82	63,816
Hanang	6,046	15	33,448	85	39,494
Mbulu	11,688	28	30,202	72	41,889
Simanjiro	4,395	19	18,722	81	23,117
Kiteto	5,741	19	24,455	81	30,196
Total	39,401	20	159,112	80	198,513

4.5: Number and Percentage of Agricultural Households By Whether Female Members of the Household Own or Have Customary Right to Land By District during 2007/08 Agriculture year

District	Do any Female Members of the Hh own or have customary right to Land				
	Yes	%	No	%	Total
Babati	96,983	27	261,986	73	358,969
Hanang	44,080	21	161,467	79	205,547
Mbulu	57,931	24	184,777	76	242,708
Simanjiro	97,208	29	233,571	71	330,779
Kiteto	101,503	34	196,918	66	298,421
Total	31,750	16	166,763	84	198,513

4.6: Number of Agricultural Households by Type of Land Use and District for the 2007/08 agriculture year

District	Type of land use												Total number of households
	Households under Temporary Mono Crops	Households under Temporary Mixed Crops	Households under Permanent Mono Crops	Households under Permanent Mixed Crops	Households under Permanent / Annual Mix	Households under Pasture	Households under Fallow	Households under Natural Bush	Households under Planted Trees	Households Rented to Others	Households Unusable	Households of Uncultivated Usable Land	
Babati	23,536	31,118	2,843	1,738	20,851	7,740	3,791	790	948	1,422	948	790	63,816
Hanang	18,626	30,132	1,268	0	683	6,924	3,803	1,950	1,755	1,658	780	975	39,494
Mbulu	11,584	37,959	931	207	1,551	18,307	1,345	4,448	1,758	2,586	2,172	1,758	41,889
Simanjir o	15,525	3,938	57	0	171	3,311	5,308	457	0	400	571	1,541	23,117
Kiteto	19,534	11,184	2,162	373	373	522	2,013	596	75	1,789	149	3,281	30,196
Total	88,806	114,332	7,261	2,317	23,629	36,803	16,260	8,241	4,536	7,854	4,620	8,345	198,513

4.7: Area of Land (ha) by land use and District for the 2007/08 agriculture year

District	Land use area												Total area (ha)
	Area under Temporary Mono Crops	Area under Temporary Mixed Crops	Area under Permanent Mono Crops	Area under Permanent Mixed Crops	Area under Permanent / Annual Mix	Area under Pasture	Area under Fallow	Area under Natural Bush	Area under Planted Trees	Area Rented to Others	Area Unusable	Area of Uncultivated Usable Land	
Babati	39,477	45,982	1,871	615	29,210	7,220	4,141	671	626	1,599	674	1,359	133,445
Hanang	34,960	42,951	517	.	717	13,907	5,551	1,402	219	2,162	365	1,244	103,993
Mbulu	9,820	43,240	132	31	701	27,166	1,685	4,753	691	2,251	2,910	2,188	95,569
Simanjiro	42,936	16,835	231	.	116	19,481	26,945	1,756	.	1,065	3,076	9,509	121,950
Kiteto	61,395	53,022	2,645	1,532	1,479	1,570	7,165	3,471	604	9,925	664	9,661	153,132
Total	188,587	202,029	5,396	2,178	32,223	69,344	45,487	12,053	2,140	17,001	7,689	23,961	608,087.93
%	31.0	33.2	0.9	0.4	5.3	11.4	7.5	2.0	0.4	2.8	1.3	3.9	100.0

5.1: Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - BABATI DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	5,529	85.4	948	14.6	6,476	100	47,862	82.6	10,109	17.4	57,972	100
Paddy	0	.0	0	.0	.0	.0	2,211	93.3	158	6.7	2,369	100
Sorghum	0	.0	0	.0	.0	.0	3,949	61.0	2,527	39.0	6,476	100
Bulrush	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Millet												
Finger	0	.0	0	.0	.0	.0	474	60.0	316	40.0	790	100
Millet												
Wheat	0	.0	0	.0	.0	.0	632	100.0	0	.0	632	100
Barley	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
CEREALS	5,529	85	948	15	6,476	100	55,128	81	13,111	19	68,239	100
Cassava	158	100.0	0	.0	158	100	158	100.0	0	.0	158	100
Sweet	474	100.0	0	.0	474	100	316	66.7	158	33.3	474	100
Potato												
Irish	790	100.0	0	.0	790	100	0	.0	0	.0	.0	100
potatoes												
Yams	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	100
Coco Yam	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	100
ROOTS & TUBERS	1,422	100	0	.0	1,422	100	474	75	158	25	632	100
Mung Bean	0	.0	0	.0	.0	100	0	.0	0	.0	.0	100
Beans	3,949	89.3	474	10.7	4,423	100	12,637	74.1	4,423	25.9	17,060	100
Cowpeas	0	.0	158	100.0	158	100	474	60.0	316	40.0	790	100
Green gram	0	.0	0	.0	.0	100	316	100.0	0	.0	316	100
Chick peas	0	.0	0	.0	.0	100	1,264	88.9	158	11.1	1,422	100
Bambaranuts	158	100.0	0	.0	158	100	158	50.0	158	50.0	316	100
Field Peas	0	.0	0	.0	.0	100	0	.0	0	.0	.0	100
PULSES	4,107	87	632	13	4,739	100	14,848	75	5,055	25	19,903	100
Sunflower	0	.0	0	.0	.0	.0	11,373	76.6	3,475	23.4	14,848	100
Simsim	0	.0	0	.0	.0	.0	1,738	84.6	316	15.4	2,053	100
Groundnut	0	.0	0	.0	.0	.0	948	66.7	474	33.3	1,422	100
Soya Beans	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Castor Fung	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
OIL SEEDS & OIL NUTS	0	.0	0	.0	.0	.0	14,059	77	4,265	23	18,323	100

Cont. Table 5.1 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - BABATI DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	158	100.0	0	.0	158	100.0	0	.0	0	.0	0	.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Aubergine												
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	158	100.0	0	.0	158	100.0	158	100.0	0	.0	158	100.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	316	66.7	158	33.3	474	100.0
Tomatoes	158	100.0	0	.0	158	100.0	474	75.0	158	25.0	632	100.0
Spinach	158	100.0	0	.0	158	100.0	316	66.7	158	33.3	474	100.0
Carrot	0	.0	0	.0	0	.0	158	100.0	0	.0	158	100.0
Chillies	316	100.0	0	.0	316	100.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	158	100.0	0	.0	158	100.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	1,106	100	0	.0	1,106	100	1,422	75	474	25	1,896	100
Cotton	0	.0	0	.0	0	.0	632	100.0	0	.0	632	100.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	632	100	0	.0	632	100
Total	12,163	88.5	1,580	11.5	13,743	100.0	86,562	79.0	23,062	21.0	109,625	100.0

5.2: Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - HANANG DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	195	66.7	98	33.3	293	100	34,911	91.3	3,316	8.7	38,226	100.0
Paddy	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Sorghum	0	.0	0	.0	.0	.0	2,730	87.5	390	12.5	3,121	100.0
Bulrush	0	.0	0	.0	.0	.0	1,170	100.0	0	.0	1,170	100.0
Millet												
Finger	0	.0	0	.0	.0	.0	1,170	100.0	0	.0	1,170	100.0
Millet												
Wheat	0	.0	0	.0	.0	.0	2,438	92.6	195	7.4	2,633	100.0
Barley	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
CEREALS	195	67	98	33	293	100	42,420	92	3,901	8	46,320	100
Cassava	0	.0	0	.0	.0	100	195	100.0	0	.0	195	100
Sweet	0	.0	0	.0	.0	100	0	.0	0	.0	.0	.0
Potato												
Irish	0	.0	0	.0	.0	100	98	100.0	0	.0	98	100
potatoes												
Yams	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Coco Yam	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
ROOTS & TUBERS	0	.0	0	.0	.0	.0	293	100	0	.0	293	100
Mung Bean	0	.0	0	.0	.0	100	1,073	100.0	0	.0	1,073	100
Beans	2,048	84.0	390	16.0	2,438	100	21,941	91.1	2,145	8.9	24,086	100
Cowpeas	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Green gram	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Chick peas	0	.0	0	.0	.0	.0	1,073	91.7	98	8.3	1,170	100
	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Bambaranuts												
Field Peas	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
PULSES	2,048	84	390	16	2,438	100	24,086	91	2,243	9	26,329	100
Sunflower	0	.0	0	.0	.0	.0	11,994	93.2	878	6.8	12,872	100.0
Simsim	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Groundnut	0	.0	0	.0	.0	.0	98	100.0	0	.0	98	100.0
Soya Beans	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Castor Fung	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
OIL SEEDS & OIL NUTS	0	.0	0	.0	.0	.0	12,092	93.2	878	6.8	12,970	100

Cont. Table 5.2 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - HANANG DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	195	100.0	195	100.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Aubergine												
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	390	100.0	0	.0	390	100.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	98	100.0	0	.0	98	100.0
Spinach	0	.0	0	.0	0	.0	98	100.0	0	.0	98	100.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	98	100.0	0	.0	98	100.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	.0	0	0	0	0	683	78	195	22	878	100
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Total	2,243	68	488	32	2,730	100	79,573	72	7,216	28	86,789	100

5.3 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - MBULU DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	3,413	97.1	103	2.9	3,517	100	34,339	88.3	4,551	11.7	38,890	100.0
Paddy	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Sorghum	0	.0	0	.0	.0	.0	4,137	75.5	1,345	24.5	5,482	100.0
Bulrush Millet	0	.0	0	.0	.0	.0	103	100.0	0	.0	103	100.0
Finger Millet	0	.0	0	.0	.0	.0	1,965	82.6	414	17.4	2,379	100.0
Wheat	1,655	94.1	103	5.9	1,758	100.0	310	100.0	0	.0	310	100.0
Barley	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
CEREALS	5,068	96	207	4	5,275	100	40,855	87	6,309	13	47,164	100
Cassava	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Sweet Potato	310	75.0	103	25.0	414	100	0	.0	0	.0	.0	.0
Irish potatoes	207	100.0	0	.0	207	100	0	.0	0	.0	.0	.0
Yams	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Coco Yam	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
ROOTS & TUBERS	517	83	103	17	621	100	0	.0	0	.0	.0	.0
Mung Bean	0	.0	0	.0	.0	.0	103	100.0	0	.0	103	100.0
Beans	3,206	93.9	207	6.1	3,413	100	29,788	84.7	5,378	15.3	35,166	100.0
Cowpeas	0	.0	0	.0	.0	.0	103	100.0	0	.0	103	100.0
Green gram	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Chick peas	0	.0	0	.0	.0	.0	1,138	100.0	0	.0	1,138	100.0
Bambaranuts	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Field Peas	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
PULSES	3,206	94	207	6	3,413	100	31,133	85	5,378	15	36,511	100
Sunflower	0	.0	0	.0	.0	.0	3,620	94.6	207	5.4	3,827	100.0
Simsim	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Groundnut	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Soya Beans	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Castor Fung	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
OIL SEEDS & OIL NUTS	0	.0	0	.0	.0	.0	3,620	95	207	5	3,827	100

Cont. Table 5.3 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - MBULU DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	195	100.0	195	100.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Aubergine												
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	390	100.0	0	.0	390	100.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	98	100.0	0	.0	98	100.0
Spinach	0	.0	0	.0	0	.0	98	100.0	0	.0	98	100.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	98	100.0	0	.0	98	100.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	0	0	0	0	0	683	78	195	22	878	100
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	103	100.0	0	.0	103	100.0	103	100.0	0	.0	103	100.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	103	100.0	0	.0	103	100.0	103	100.0	0	.0	103	.0
Total	8,895	10	517	1	9,412	100	76,394	86	12,090	14	88,483	100

5.4 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - SIMANJIRO DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	571	83.3	114	16.7	685	100.0	13,585	75.3	4,452	24.7	18,037	100.0
Paddy	114	66.7	57	33.3	171	100.0	342	75.0	114	25.0	457	100.0
Sorghum	57	100.0	0	.0	57	100.0	400	100.0	0	.0	400	100.0
Bulrush	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Millet												
Finger	0	.0	0	.0	0	.0	57	100.0	0	.0	57	100.0
Millet												
Wheat	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Barley	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
CEREALS	742	81	171	19	913	100	14,384	76	4,566	24	18,950	100
Cassava	0	.0	0	.0	0	.0	0	.0	57	100.0	57	100.0
Sweet	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Potato												
Irish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
potatoes												
Yams	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Coco Yam	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
ROOTS & TUBERS	0	.0	0	.0	.0	.0	0	.0	57	100.0	57	100.0
Mung Bean	0	.0	0	.0	0	.0	114	100.0	0	.0	114	100.0
Beans	228	80.0	57	20.0	285	100.0	6,393	77.8	1,827	22.2	8,219	100.0
Cowpeas	0	.0	0	.0	0	.0	1,313	100.0	0	.0	1,313	100.0
Green gram	0	.0	0	.0	0	.0	1,199	91.3	114	8.7	1,313	100.0
Chick peas	0	.0	0	.0	0	.0	114	66.7	57	33.3	171	100.0
	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bambaranuts												
Field Peas	0	.0	0	.0	0	.0	628	100.0	0	.0	628	100.0
PULSES	228	80	57	20	285	100	9,760	83.0	1,998	17.0	11,758	100.0
Sunflower	0	.0	0	.0	.0	.0	171	100.0	0	.0	171	100.0
Simsim	0	.0	0	.0	.0	.0	171	100.0	0	.0	171	100.0
Groundnut	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Soya Beans	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Castor Fung	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
OIL SEEDS & OIL NUTS	0	.0	0	.0	.0	.0	342	100.0	0	.0	342	100.0

Cont. Table 5.4 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - SIMANJIRO DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	57	100.0	0	.0	57	100.0
Radish	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Bitteer	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Aubergine												
Kothmir	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Total	970	81.0	228	19.0	1,199	100	24,487	78.8	6,621	21.2	31,108	100

5.5 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - KITETO DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	0	.0	0	.0	.0	.0	23,560	81.2	5,443	18.8	29,003	100.0
Paddy	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Sorghum	0	.0	0	.0	.0	.0	149	100.0	0	.0	149	100.0
Bulrush Millet	0	.0	0	.0	.0	.0	75	100.0	0	.0	75	100.0
Finger Millet	0	.0	0	.0	.0	.0	373	71.4	149	28.6	522	100.0
Wheat	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Barley	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
CEREALS	0	.0	0	.0	.0	.0	24,157	81	5,592	19	29,749	100
Cassava	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Sweet Potato	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Irish potatoes	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Yams	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Coco Yam	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
ROOTS & TUBERS	0	.0	0	.0	.0	.0	0	.0	0	.0	.0	.0
Mung Bean	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Beans	0	.0	0	.0	.0	.0	1,715	82.1	373	17.9	2,088	100.0
Cowpeas	0	.0	0	.0	.0	.0	224	100.0	0	.0	224	100.0
Green gram	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Chick peas	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Bambaranuts	0	.0	0	.0	.0	.0	0	.0	149	100.0	149	100.0
Field Peas	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
PULSES	0	.0	0	.0	.0	.0	1,939	78.8	522	21.2	2,460	100.0
Sunflower	0	.0	0	.0	.0	.0	6,859	81.4	1,566	18.6	8,425	100.0
Simsim	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
Groundnut	0	.0	0	.0	.0	.0	447	75.0	149	25.0	596	100.0
Soya Beans	0	.0	0	.0	.0	.0	75	100.0	0	.0	75	100.0
Castor Fung	0	.0	0	.0	.0	.0	0	.0	0	.0	0	.0
OIL SEEDS & OIL NUTS	0	.0	0	.0	.0	.0	7,381	81	1,715	19	9,096	100

Cont. Table 5.5 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - KITETO DISTRICT

Crop	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Aubergine												
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Total	0	.0	0	.0	0	.0	33,477	81	7,829	19	41,305	100

5.6: Number of Household members owning most of the crop by Sex of the Main Owner, Season and District for the agriculture year 2007/08

District	SHORT RAINY SEASON						LONG RAINY SEASON					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	6,003	84.4	1,106	15.6	7,108	100	48,810	77.1	14,532	22.9	63,342	100
Hanang	2,145	84.6	390	15.4	2,535	100	35,886	90.6	3,706	9.4	39,592	100
Mbulu	4,034	92.9	310	7.1	4,344	100	36,304	83.6	7,137	16.4	43,441	100
Simanjiro	742	81.3	171	18.8	913	100	14,213	75.0	4,738	25.0	18,950	100
Kiteto	0	.0	0	.0	0	.0	23,859	80.8	5,666	19.2	29,525	100
Total	12,924	87	1,977	13	14,901	100	159,071	82	35,779	18	194,850	100

5.7: Planted Area by District, season and Sex of Household members owning most of the crop for the agriculture year 2007/08

District	SHORT RAINY SEASON						LONG RAINY SEASON					
	Male		Female		Total		Male		Female		Total	
	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%
Babati	4,965	84.4	640	15.6	5,605	100	79,307	77.1	13,005	22.9	92,311	100
Hanang	1,421	84.6	296	15.4	1,717	100	71,118	90.6	5,022	9.4	76,140	100
Mbulu	2,481	92.9	147	7.1	2,628	100	44,969	83.6	5,963	16.4	50,932	100
Simanjiro	1,017	81.3	208	18.8	1,225	100	47,722	75.0	8,446	25.0	56,168	100
Kiteto	.0	.0	.0	.0	.0	.0	91,668	80.8	18,065	19.2	109,734	100
Total	9,884	87	1,290	13	11,175	100	334,784	82	50,501	18	385,285	100

CROP PRODUCTION BY DISTRICT

5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Maize				Paddy			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	64,448	61,327	130,092.48	2.1	2,369	1,823	6,502.14	3.6
Hanang	38,519	34,334	60,614.06	1.8	0	0	0	0
Mbulu	42,407	32,338	62,926.28	1.9	0	0	0	0
Simanjiro	18,722	38,054	32,062.98	0.8	628	635	1,857.80	2.9
Kiteto	29,003	96,260	115,693.09	1.2	0	0	0	0
Total	193,098	262,313	401,388.89	1.5	2,997	2,458	8,359.93	3.4

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Sorghum				Bulrush Millet			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	6,476	2,983	3,428.38	1.1	0	0	0	0
Hanang	3,121	1,692	1,654.85	1.0	1,170	780	708.94	0.9
Mbulu	5,482	2,124	2,023.10	1.0	103	167	72.40	0.4
Simanjiro	457	1,410	530.83	0.4	0	0	0	0
Kiteto	149	151	141.66	0.9	75	21	14.91	0.7
Total	15,684	8,359	7,778.82	0.9	1,348	968	796.26	0.8

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Finger Millet				Wheat			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	790	310	146.90	0.47	632	890	1,374.26	1.5
Hanang	1,170	612	699.48	1.14	2,633	9,189	13,656.64	1.5
Mbulu	2,379	485	310.60	0.64	2,069	429	383.21	0.9
Simanjiro	57	23	11.42	0.49	0	0	0	0
Kiteto	522	468	405.60	0.87	0	0	0	0
Total	4,918	1,898	1,574.00	0.83	5,333	10,508	15,414.11	1.5

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Barley				Seaweed			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Coco Yam				Mung Bean			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0	0	0	0	0.0
Hanang	0	0	0	0	1,073	1,105	442.33	0.4
Mbulu	0	0	0	0	103	25	6.21	0.2
Simanjiro	0	0	0	0	114	601	308.22	0.5
Kiteto	0	0	0	0	0	0	0	0.0
Total	0	0	0	0	1,290	1,731	756.76	0.4

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Beans				Cowpeas			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	21,483	12,051	13,079.30	1.1	948	272	184.66	0.7
Hanang	26,524	15,982	13,618.42	0.9	0	0	0	-
Mbulu	38,580	12,549	9,888.28	0.8	103	10	8.27	0.8
Simanjiro	8,505	11,973	7,146.25	0.6	1,313	1,144	393.27	0.3
Kiteto	2,088	1,509	618.09	0.4	224	85	58.90	0.7
Total	97,179	54,064	44,350.34	0.8	2,588	1,511	645.10	0.4

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Green gram				Chick peas			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	316	96	63.18	0.7	1,422	1,455	954.08	0.7
Hanang	0	0	0	-	1,170	1,777	1,742.22	1.0
Mbulu	0	0	0	-	1,138	722	690.30	1.0
Simanjiro	1,313	1,566	413.25	0.3	171	46	26.26	0.6
Kiteto	0	0	0	-	0	0	0	0
Total	1,629	1,662	476.43	0.3	3,901	4,000	3,412.86	0.9

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Cassava				Sweet Potato			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	316	301	123.21	0.4	948	192	472.30	2.5
Hanang	195	99	87.76	0.9	0	0	.00	-
Mbulu	310	96	74.47	0.8	2,482	598	895.50	1.5
Simanjiro	57	462	45.66	0.1	0	0	.00	-
Kiteto	0	0	0	-	0	0	.00	-
Total	878	958	331.11	0.3	3,430	789	1,367.81	1.7

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Irish potatoes				Yams			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	790	160	1,052.02	6.6	0	0	0	0
Hanang	98	20	136.52	6.9	0	0	0	0
Mbulu	207	25	67.23	2.7	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	1,094	205	1,255.77	6.1	0	0	0	0

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Bambaranuts				Field Peas			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	474	288	362.84	1.26	0	0	0	0
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	628	624	118.72	0.2
Kiteto	149	23	10.44	0.46	0	0	0	-
Total	623	310	373.27	1.2	628	624	118.72	0.2

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Sunflower				Simsim			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	14,848	12,144	8,716.11	0.7	2,053	1,599	814.29	0.5
Hanang	12,872	11,840	12,440.23	1.1	0	0	0	0
Mbulu	3,827	3,769	2,244.96	0.6	0	0	0	0
Simanjiro	171	624	15.98	0.0	171	185	28.48	0.2
Kiteto	8,425	10,697	5,826.81	0.5	0	0	0	0
Total	40,144	39,074	29,244.09	0.7	2,225	1,784	842.77	0.5

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Groundnut				Soya Beans			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	1,422	777	931.97	1.2	0	0	0	0
Hanang	98	10	9.75	1.0	0	0	0	0
Mbulu	0	0	0	-	0	0	0	0
Simanjiro	0	0	0	-	0	0	0	0
Kiteto	596	460	377.49	0.8	75	60	29.82	0.5
Total	2,116	1,247	1,319.21	1.1	75	60	29.82	0.5

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Castor Fung				Okra			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0	158	4	3.95	1.0
Hanang	0	0	0	0	195	158	156.03	1.0
Mbulu	0	0	0	0	207	178	113.77	0.6
Simanjiro	0	0	0	0	57	46	34.25	0.7
Kiteto	0	0	0	0	0	0	0	0
Total	0	0	0	0	617	386	308.00	0.8

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Radish				Turmeric			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Bitter Aubergine				Kothmir			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Onion				Ginger			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	316	35	42.33	1.2	0	0	0	0
Hanang	390	188	548.33	2.9	0	0	0	0
Mbulu	103	21	67.02	3.2	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	809	244	657.69	2.7	0	0	0	0

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Zukkin				Star Fruit			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Cabbage				Tomatoes			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	474	72	2,383.15	33.0	790	105	723.30	6.9
Hanang	0	0	0	0.0	98	20	58.51	3.0
Mbulu	0	0	0	0.0	0	0	0	0.0
Simanjiro	0	0	0	0.0	0	0	0	0.0
Kiteto	0	0	0	0.0	0	0	0	0.0
Total	474	72	2,383.15	33.0	887	125	781.81	6.3

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Spinach				Carrot			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	632	19	46.91	2.4	158	3	2.84	0.9
Hanang	98	49	48.76	1.0	0	0	0	0
Mbulu	0	0	0	0.0	0	0	0	0
Simanjiro	0	0	0	0.0	0	0	0	0
Kiteto	0	0	0	0.0	0	0	0	0
Total	729	69	95.67	1.4	158	3	2.84	0.9

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Chillies				Amaranths			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	316	36	414.65	11.6	0	0	0	0
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	316	36	414.65	11.6	0	0	0	0

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Pumpkins				Cucumber			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0	0	0	0	0
Hanang	98	4	.00	0.00	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	98	4	0	0.00	0	0	0	0

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Egg Plant				Water Mellon			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0	158	16	78.98	4.9
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	0	0	0	0	158	16	78.98	4.9

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Cotton				Tobacco			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	632	959	1,438.23	1.5	0	0	0	0
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	207	23	20.69	0.9
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	632	959	1,438.23	1.5	207	23	20.69	0.9

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Pyrethrum				Jute			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

Cont. Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08 by District

District	Malay			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Babati	0	0	0	0
Hanang	0	0	0	0
Mbulu	0	0	0	0
Simanjiro	0	0	0	0
Kiteto	0	0	0	0
Total	0	0	0	0

CROP PRODUCTION GENERAL

5.9: Number of Crop Growing Households and Area Planted (ha) by Season and District

Region	Short Rainy Season		Long Rainy Season		Total area planted (hectare)	% Area planted in short rainy season
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)		
Babati	6,950	5,605	58,445	92,311	97,916	5.72
Hanang	2,535	1,717	39,397	76,140	77,857	2.21
Mbulu	4,137	2,628	40,545	50,932	53,559	4.91
Simanjiro	913	1,225	18,665	56,168	57,393	2.13
Kiteto	0	0	29,376	109,734	109,734	0
Total	14,536	11,175	186,427	385,285	396,459	2.82

**5.10: Number of Agricultural Households by Area Planted (ha) and crop for the agriculture year 2007/08
Short and Long Season - Babati District**

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	6,476	3,642	57,972	57,685	64,448	61,327
Paddy	0	0	2,369	1,823	2,369	1,823
Sorghum	0	0	6,476	2,983	6,476	2,983
Bulrush Millet	0	0	0	0	0	0
Finger Millet	0	0	790	310	790	310
Wheat	0	0	632	890	632	890
Barley	0	0	0	0	0	0
CEREALS		3,642		63,690		67,332
Cassava	158	32	158	269	316	301
Sweet Potato	474	48	474	144	948	192
Irish potatoes	790	160	0	0	790	160
Seaweeds	0	0	0	0	0	0
Coco Seaweed	0	0	0	0	0	0
ROOTS & TUBERS		240		412		652
Mung Bean	0	0	0	0	0	0
Beans	4,423	1,535	17,060	10,516	21,483	12,051
Cowpeas	158	32	790	240	948	272
Green gram	0	0	316	96	316	96
Chick peas	0	0	1,422	1,455	1,422	1,455
Bambaranuts	158	32	316	256	474	288
Field Peas	0	0	0	0	0	0
PULSESES		1,599		12,563		14,161
Sunflower	0	0	14,848	12,144	14,848	12,144
Simsim	0	0	2,053	1,599	2,053	1,599
Groundnut	0	0	1,422	777	1,422	777
Soya Beans	0	0	0	0	0	0
Castor Fung	0	0	0	0	0	0
OIL SEEDS & OIL NUTS		0		14,520		14,520
Okra	158	4	0	0	158	4
Radish	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0
Kothmir	0	0	0	0	0	0
Onion	158	32	158	3	316	35
Ginger	0	0	0	0	0	0
Zukkin	0	0	0	0	0	0
Star Fruit	0	0	0	0	0	0
Cabbage	0	0	474	72	474	72
Tomatoes	158	32	632	73	790	105
Spinach	158	4	474	15	632	19
Carrot	0	0	158	3	158	3
Chillies	316	36	0	0	316	36
Amaranths	0	0	0	0	0	0
Pumpkins	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0
Water Mellon	158	16	0	0	158	16
FRUITS & VEGETABLES		124		166		290
Cotton	0	0	632	959	632	959
Tobacco	0	0	0	0	0	0
Pyrethrum	0	0	0	0	0	0
Jute	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0
CASH CROPS		0		959		959
Malay	0	0	0	0	0	0
Total		5,605		92,311		97,916

**5.11: Number of Agricultural Households by Area Planted (ha) and crop for the agriculture year 2007/08
Short and Long Season - Hanang District**

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	293	148	38,226	34,186	38,519	34,334
Paddy	0	0	0	0	0	0
Sorghum	0	0	3,121	1,692	3,121	1,692
Bulrush Millet	0	0	1,170	780	1,170	780
Finger Millet	0	0	1,170	612	1,170	612
Wheat	0	0	2,633	9,189	2,633	9,189
Barley	0	0	0	0	0	0
CEREALS		148		46,458		46,606
Cassava	0	0	195	99	195	99
Sweet Potato	0	0	0	0	0	0
Irish potatoes	0	0	98	20	98	20
Seaweeds						
Coco Seeweed						
ROOTS & TUBERS		0		118		118
Mung Bean	0	0	1,073	1,105	1,073	1,105
Beans	2,438	1,569	24,086	14,413	26,524	15,982
Cowpeas	0	0	0	0	0	0
Green gram	0	0	0	0	0	0
Chick peas	0	0	1,170	1,777	1,170	1,777
Bambaranuts	0	0	0	0	0	0
Field Peas	0	0	0	0	0	0
PULSES		1,569		17,295		18,864
Sunflower	0	0	12,872	11,840	12,872	11,840
Simsim	0	0	0	0	0	0
Groundnut	0	0	98	10	98	10
Soya Beans	0	0	0	0	0	0
Castor Fung	0	0	0	0	0	0
OIL SEEDS & OIL NUTS		0		11,850		11,850
Okra	0	0	195	158	195	158
Radish	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0
Kothmir	0	0	0	0	0	0
Onion	0	0	390	188	390	188
Ginger	0	0	0	0	0	0
Zukkin	0	0	0	0	0	0
Star Fruit	0	0	0	0	0	0
Cabbage	0	0	0	0	0	0
Tomatoes	0	0	98	20	98	20
Spinach	0	0	98	49	98	49
Carrot	0	0	0	0	0	0
Chillies	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0
Pumpkins	0	0	98	4	98	4
Cucumber	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0
Water Mellon	0	0	0	0	0	0
FRUITS & VEGETABLES		0		418		418
Cotton	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0
Pyrethrum	0	0	0	0	0	0
Jute	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0
CASH CROPS		0		0		0
Malay	0	0	0	0	0	0
Total		1,717		76,140		77,857

5.12: Number of Agricultural Households by Area Planted (ha) and crop for the agriculture year 2007/08 Short and Long Season - Mbulu District

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	3,517	1,538	38,890	30,799	42,407	32,338
Paddy	0	0	0	0	0	0
Sorghum	0	0	5,482	2,124	5,482	2,124
Bulrush Millet	0	0	103	167	103	167
Finger Millet	0	0	2,379	485	2,379	485
Wheat	1,758	314	310	115	2,069	429
Barley	0	0	0	0	0	0
CEREALS		1,853		33,691		35,543
Cassava	0	0	310	96	310	96
Sweet Potato	414	94	2,069	503	2,482	598
Irish potatoes	207	25	0	0	207	25
Seeweeds						
Coco Seeweed						
ROOTS & TUBERS		119		600		719
Mung Bean	0	0	103	25	103	25
Beans	3,413	643	35,166	11,906	38,580	12,549
Cowpeas	0	0	103	10	103	10
Green gram	0	0	0	0	0	0
Chick peas	0	0	1,138	722	1,138	722
Bambaranuts	0	0	0	0	0	0
Field Peas	0	0	0	0	0	0
PULSESES		643		12,664		13,307
Sunflower	0	0	3,827	3,769	3,827	3,769
Simsim	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0
Castor Fung	0	0	0	0	0	0
OIL SEEDS & OIL NUTS		0		3,769		3,769
Okra	0	0	207	178	207	178
Radish	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0
Kothmir	0	0	0	0	0	0
Onion	0	0	103	21	103	21
Ginger	0	0	0	0	0	0
Zukkin	0	0	0	0	0	0
Star Fruit	0	0	0	0	0	0
Cabbage	0	0	0	0	0	0
Tomatoes	0	0	0	0	0	0
Spinach	0	0	0	0	0	0
Carrot	0	0	0	0	0	0
Chillies	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0
Pumpkins	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0
Water Mellon	0	0	0	0	0	0
FRUITS & VEGETABLES		0		199		199
Cotton	0	0	0	0	0	0
Tobacco	103	13	103	10	207	23
Pyrethrum	0	0	0	0	0	0
Jute	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0
CASH CROPS		13		10		23
Malay	0	0	0	0	0	0
Total		2,628		50,932		53,559

**5.13: Number of Agricultural Households by Area Planted (ha) and crop for the agriculture year 2007/08
Short and Long Season - Simanjiro District**

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	685	822	18,037	37,233	18,722	38,054
Paddy	171	266	457	370	628	635
Sorghum	57	46	400	1,363	457	1,410
Bulrush Millet	0	0	0	0	0	0
Finger Millet	0	0	57	23	57	23
Wheat	0	0	0	0	0	0
Barley	0	0	0	0	0	0
CEREALS		1,133		38,989		40,123
Cassava	0	0	57	462	57	462
Sweet Potato	0	0	0	0	0	0
Irish potatoes	0	0	0	0	0	0
Seaweeds						
Coco Seeweed						
ROOTS & TUBERS		0		462		462
Mung Bean	0	0	114	601	114	601
Beans	285	91	8,219	11,881	8,505	11,973
Cowpeas	0	0	1,313	1,144	1,313	1,144
Green gram	0	0	1,313	1,566	1,313	1,566
Chick peas	0	0	171	46	171	46
Bambaranuts	0	0	0	0	0	0
Field Peas	0	0	628	624	628	624
PULSES		91		15,862		15,953
Sunflower	0	0	171	624	171	624
Simsim	0	0	171	185	171	185
Groundnut	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0
Castor Fung	0	0	0	0	0	0
OIL SEEDS & OIL NUTS		0		809		809
Okra	0	0	57	46	57	46
Radish	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0
Kothmir	0	0	0	0	0	0
Onion	0	0	0	0	0	0
Ginger	0	0	0	0	0	0
Zukkin	0	0	0	0	0	0
Star Fruit	0	0	0	0	0	0
Cabbage	0	0	0	0	0	0
Tomatoes	0	0	0	0	0	0
Spinach	0	0	0	0	0	0
Carrot	0	0	0	0	0	0
Chillies	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0
Pumpkins	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0
Water Mellon	0	0	0	0	0	0
FRUITS & VEGETABLES		0		46		46
Cotton	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0
Pyrethrum	0	0	0	0	0	0
Jute	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0
CASH CROPS		0		0		0
Malay	0	0	0	0	0	0
Total		1,225		56,168		57,393

5.14: Number of Agricultural Households by Area Planted (ha) and crop for the agriculture year 2007/08 Short and Long Season -Kiteto District

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	0	0	29,003	96,260	29,003	96,260
Paddy	0	0	0	0	0	0
Sorghum	0	0	149	151	149	151
Bulrush Millet	0	0	75	21	75	21
Finger Millet	0	0	522	468	522	468
Wheat	0	0	0	0	0	0
Barley	0	0	0	0	0	0
CEREALS		0		96,900		96,900
Cassava	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0
Irish potatoes	0	0	0	0	0	0
Seaweeds						
Coco Seeweed						
ROOTS & TUBERS		0		0		0
Mung Bean	0	0	0	0	0	0
Beans	0	0	2,088	1,509	2,088	1,509
Cowpeas	0	0	224	85	224	85
Green gram	0	0	0	0	0	0
Chick peas	0	0	0	0	0	0
Bambaranuts	0	0	149	23	149	23
Field Peas	0	0	0	0	0	0
PULSES		0		1,617		1,617
Sunflower	0	0	8,425	10,697	8,425	10,697
Simsim	0	0	0	0	0	0
Groundnut	0	0	596	460	596	460
Soya Beans	0	0	75	60	75	60
Castor Fung	0	0	0	0	0	0
OIL SEEDS & OIL NUTS		0		11,217		11,217
Okra	0	0	0	0	0	0
Radish	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0
Kothmir	0	0	0	0	0	0
Onion	0	0	0	0	0	0
Ginger	0	0	0	0	0	0
Zukkin	0	0	0	0	0	0
Star Fruit	0	0	0	0	0	0
Cabbage	0	0	0	0	0	0
Tomatoes	0	0	0	0	0	0
Spinach	0	0	0	0	0	0
Carrot	0	0	0	0	0	0
Chillies	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0
Pumpkins	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0
Water Mellon	0	0	0	0	0	0
FRUITS & VEGETABLES		0		0		0
Cotton	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0
Pyrethrum	0	0	0	0	0	0
Jute	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0
CASH CROPS		0		0		0
Malay	0	0	0	0	0	0
Total		0		109,734		109,734

CROP STORAGE

5.15: Number of households Storing Crops Season and District

District	SHORT RAINY SEASON					LONG RAINY SEASON					SHORT & LONG SEASON				
	Number of households storing crops	%	Number of households not storing crops	%	Total	Number of households storing crops	%	Number of households not storing crops	%	Total	Number of households storing crops	%	Number of households not storing crops	%	Total
Babati	6,634	95	316	5	6,950	57,972	16	474	0	357,968	64,606	99	790	1	65,396
Hanang	2,438	96	98	4	2,535	38,616	26	780	1	150,275	41,054	98	878	2	41,932
Mbulu	4,034	98	103	3	4,137	40,028	26	517	0	152,220	44,061	99	621	1	44,682
Simanjiro	913	100	0	0	913	18,151	8	514	0	238,161	19,064	97	514	3	19,578
Kiteto	0	0	0	0	0	28,854	15	522	0	193,658	28,854	98	522	2	29,376
Total	14,019	96	517	4	14,536	183,621	98	2,807	2	186,427	197,640	98	3,324	2	200,964

Cont. 5.16: Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, Babati District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	158	100.0	0	.0	158	100.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer Aubergine	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	158	100.0	0	.0	158	100.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	158	100.0	0	.0	158	100.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	158	100.0	0	.0	158	100.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	316	100.0	0	.0	316	100.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	158	100.0	0	.0	158	100.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	0	0	0	0	0	0	0	0	0	0	0	1,106	73.2	0	.9	1,106	100.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3317	32.4	0	2.2	0	.2	8530	62.1	0	2.2	0	.0	1580	11.5	316	.0	13743	100.0

5.17: Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, Hanang District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	0	.0	0	.0	0	.0	293	100.0	0	.0	0	.0	0	.0	0	.0	293	100.0
Paddy	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Sorghum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bulrush Millet	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Finger Millet	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Wheat	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Barley	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CEREALS	0	.0	0	.0	0	.0	293	100.0	0	.0	0	.0	0	.0	0	.0	293	100.0
Cassava	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Sweet Potato	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Irish potatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Yams	0	.0	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Coco Yam	0	.0	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
ROOTS & TUBERS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Mung Bean	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Beans	975	40.0	0	.0	0	.0	1,365	56.0	0	.0	0	.0	98	4.0	0	.0	2,438	100.0
Cowpeas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Green gram	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chick peas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bambaranuts	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Field Peas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
PULSES	975	40.0	0	.0	0	.0	1,365	56.0	0	.0	0	.0	98	4.0	0	.0	2,438	100.0
Sunflower	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Simsim	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Groundnut	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Soya Beans	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Castor Fung	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
OIL SEEDS & OIL NUTS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

Cont. 5.17: Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, Hanang District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer Aubergine	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	0	0	0	0	0	0	.0	0	.0	0	.0	0	.0	0	.9	0	.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Total	975	35.7	0	.0	0	.0	1658	60.7	0	.0	0	.0	98	3.6	0	.0	2730	100.0

5.18: Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, Mbulu District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	2,689	76.5	0	.0	0	.0	724	20.6	0	.0	0	.0	103	2.9	0	.0	3,517	100.0
Paddy	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	100.0
Sorghum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	100.0
Bulrush Millet	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Finger Millet	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Wheat	1,758	100.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1,758	100.0
Barley	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CEREALS	4,448	84.3	0	.0	0	.0	724	13.7	0	.0	0	.0	103	2.0	0	.0	5,275	100.0
Cassava	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Sweet Potato	0	.0	0	.0	0	.0	103	25.0	0	.0	0	.0	310	75.0	0	.0	414	100.0
Irish potatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	207	100.0	0	.0	207	100.0
Yams	0	.0	0	.0	0	.0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0
Coco Yam	0	.0	0	.0	0	.0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0
ROOTS & TUBERS	0	.0	0	.0	0	.0	103	16.7	0	.0	0	.0	517	83.3	0	.0	621	100.0
Mung Bean	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Beans	2,586	75.8	0	.0	0	.0	724	21.2	0	.0	0	.0	103	3.0	0	.0	3,413	100.0
Cowpeas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Green gram	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chick peas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bambaranuts	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Field Peas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
PULSES	2,586	75.8	.0	.0	.0	.0	724	21.2	0	.0	0	.0	103	3.0	0	.0	3,413	100.0
Sunflower	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Simsim	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Groundnut	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Soya Beans	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Castor Fung	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
OIL SEEDS & OIL NUTS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

Cont. 5.18: Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, Mbulu District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer Aubergine	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	103	100.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	103	100.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	103	100.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	103	100.0
Total	7137	75.8	0	.0	0	.0	1551	16.5	0	.0	0	.0	724	7.7	0	.0	9412	100.0

5.19: Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, Simanjiro District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	457	66.7	0	.0	0	.0	228	33.3	0	.0	0	.0	0	.0	0	.0	685	100.0
Paddy	0	.0	0	.0	0	.0	171	100.0	0	.0	0	.0	0	.0	0	.0	171	100.0
Sorghum	57	100.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	57	100.0
Bulrush Millet	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Finger Millet	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Wheat	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Barley	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CEREALS	514	56.3	0	.0	0	.0	400	43.8	0	.0	0	.0	0	.0	0	.0	913	100.0
Cassava	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Sweet Potato	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Irish potatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Yams	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Coco Yam	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
ROOTS & TUBERS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Mung Bean	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Beans	228	80.0	0	.0	0	.0	57	20.0	0	.0	0	.0	0	.0	0	.0	285	100.0
Cowpeas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Green gram	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chick peas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bambaranuts	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Field Peas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
PULSES	228	80.0	0	.0	0	.0	57	20.0	0	.0	0	.0	0	.0	0	.0	285	100.0
Sunflower	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Simsim	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Groundnut	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Soya Beans	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Castor Fung	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
OIL SEEDS & OIL NUTS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

Cont. 5.19 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, Simanjiro District																		
Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer Aubergine	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Total	742	61.9	0	.0	0	.0	457	38.1	0	.0	0	.0	0	.0	0	.0	1199	100.0

5.20: Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, Kiteto District																		
Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Paddy	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Sorghum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bulrush Millet	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Finger Millet	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Wheat	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Barley	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CEREALS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cassava	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Sweet Potato	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Irish potatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Yams	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Coco Yam	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
ROOTS & TUBERS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Mung Bean	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Beans	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cowpeas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Green gram	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chick peas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bambaranuts	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Field Peas	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
PULSES	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Sunflower	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Simsim	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Groundnut	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Soya Beans	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Castor Fung	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
OIL SEEDS & OIL NUTS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

Cont. 5.20: Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, Kiteto District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer Aubergine	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Total	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

Cont. 5.21: Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, Babati District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0	.0	.0	.0	.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0
Bitteer Aubergine	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0	.0	.0
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	158	100.0	0	.0	158	100.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	474	100.0	0	.0	474	100.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	632	100.0	0	.0	632	100.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	474	100.0	0	.0	474	100.0
Carrot	0	.0	0	.0	0	.0	158	100.0	0	.0	0	.0	0	.0	0	.0	158	100.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0	.0	.0	.0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	0	0	0	0	0	158	8.3	0	.0	0	.0	1,738	91.7	0	.9	1,896	100.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	632	100.0	0	.0	632	100.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.0	0	.0	.0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	632	100.0	0	.0	632	100.0
Total	64448	32.4	2369	2.2	316	.3	30960	44.7	158	.1	0	.0	11215	10.2	158	.4	109625	100.0

Cont. 5.24: Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, Simanjiro District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	57	100.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	57	100.0
Radish	0	.0	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Turmeric	0	.0	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Bitteer Aubergine	0	.0	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	57	100.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	57	100.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	.0	.9	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Total	6964	22.3	285	.9	0	.0	19863	63.7	228	.7	285	.9	3539	11.4	0	.0	31165	100.0

Cont. 5.25: Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, Kiteto District

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Radish	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Turmeric	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Bitteer Aubergine	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Kothmir	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Onion	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Ginger	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Zukkin	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Star Fruit	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cabbage	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tomatoes	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Spinach	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Carrot	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Chillies	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Amaranths	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pumpkins	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cucumber	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Egg Plant	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Water Mellon	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Malay	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
FRUITS & VEGETABLES	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Cotton	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Tobacco	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Pyrethrum	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Jute	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Seaweed	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
CASH CROPS	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
Total	4399	10.6	522	1.3	0	.0	30867	74.7	0	.0	149	.4	4175	10.1	969	2.3	41305	100.0

INPUT USE

5.26: Number of Households and Planted Area by Organic Fertiliser Use and District - SHORT RAINY SEASON

District	Organic Fertilizer Use						% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area NOT Applied with Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Babati	3,791	3,657	3,159	1,947	6,950	5,605	-
Hanang	0	0	2,535	1,717	2,535	1,717	0.0
Mbulu	1,655	827	2,482	1,801	4,137	2,628	31.5
Simanjiro	114	92	799	1,132	913	1,225	7.5
Kiteto	0	0	0	0	0	0	0
Total	5,560	4,577	8,976	6,598	14,536	11,175	41.0

5.27: Number of Households and Planted Area by Organic Fertiliser Use and District - LONG RAINY SEASON

District	Organic Fertilizer Use						% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area NOT Applied with Organic Fertilizer	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Babati	13,901	9,451	44,545	82,861	58,445	92,311	10.2
Hanang	5,168	5,009	34,228	71,131	39,397	76,140	6.6
Mbulu	15,825	10,560	24,720	40,372	40,545	50,932	20.7
Simanjiro	457	442	18,208	55,726	18,665	56,168	0.8
Kiteto	224	2,237	29,152	107,497	29,376	109,734	2.0
Total	35,574	27,699	150,853	357,586	186,427	385,285	7.2

5.28: Number of Households and Planted Area by Inorganic Fertiliser Use and District - SHORT RAINY SEASON

District	Inorganic Fertilizer Use						% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area NOT Applied with Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Babati	6,950	64	0	5,541	6,950	5,605	1.1
Hanang	2,535	0	0	1,717	2,535	1,717	0.0
Mbulu	4,137	0	0	2,628	4,137	2,628	0.0
Simanjiro	913	437	0	788	913	1,225	35.7
Kiteto	0	0	0	0	0	0	0
Total	729	501	0	10,674	14,536	11,175	4.5

5.29: Number of Households and Planted Area by Inorganic Fertiliser Use and District - LONG RAINY SEASON

District	Inorganic Fertilizer Fertilizer Use						% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area NOT Applied with Inorganic Fertilizer	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Babati	58,445	80	0	92,231	58,445	92,311	0.1
Hanang	39,397	266	0	75,873	39,397	76,140	0.4
Mbulu	40,545	42	0	50,890	40,545	50,932	0.1
Simanjiro	18,665	923	0	55,245	18,665	56,168	1.6
Kiteto	29,376	0	0	109,734	29,376	109,734	0.0
Total	2,408	1,312	0	383,973	186,427	385,285	0.3

5.30: Number of Households and Planted Area by Fungicide Use and District - Short Rainy Season

District	Fungicide Use						% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Number of Households NOT using Fungicide	Planted Area NOT Applied with Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Babati	790	144	6,160	5,461	6,950	5,605	2.6
Hanang	0	0	2,535	1,717	2,535	1,717	0
Mbulu	0	0	4,137	2,628	4,137	2,628	0
Simanjiro	171	185	742	1,040	913	1,225	15.1
Kiteto	0	0	0	0	0	0	0
Total	961	329	13,575	10,846	14,536	11,175	2.9

5.31: Number of Households and Planted Area by Fungicide Use and District - Long Rainy Season

District	Fungicide Use						% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Number of Households NOT using Fungicide	Planted Area NOT Applied with Fungicide	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Babati	1,896	1,422	56,550	90,889	58,445	92,311	1.5
Hanang	1,073	3,249	38,324	72,891	39,397	76,140	4.3
Mbulu	103	42	40,441	50,890	40,545	50,932	0.1
Simanjiro	571	1,057	18,094	55,111	18,665	56,168	1.9
Kiteto	149	294	29,227	109,440	29,376	109,734	0.3
Total	3,792	6,064	182,636	379,221	186,427	385,285	1.6

5.32: Number of Households and Planted Area by Herbicide Use and District - Short Rainy Season

District	Herbicide Use						% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Number of Households NOT using Herbicides	Planted Area NOT Applied with Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Babati	316	288	6,634	5,317	6,950	5,605	5.1
Hanang	0	0	2,535	1,717	2,535	1,717	0.0
Mbulu	0	0	4,137	2,628	4,137	2,628	0.0
Simanjiro	628	399	285	826	913	1,225	32.5
Kiteto	0	0	0	0	0	0	0
Total	944	686	13,592	10,488	14,536	11,175	6.1

5.33: Number of Households and Planted Area by Herbicide Use and District - Long Rainy Season

District	Herbicide Use						% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Number of Households NOT using Herbicides	Planted Area NOT Applied with Herbicide	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Babati	474	285	57,972	92,026	58,445	92,311	0.3
Hanang	1,853	4,607	37,544	71,533	39,397	76,140	6.1
Mbulu	103	84	40,441	50,848	40,545	50,932	0.2
Simanjiro	913	959	17,751	55,209	18,665	56,168	1.7
Kiteto	0	0	29,376	109,734	29,376	109,734	0.0
Total	3,343	5,935	183,084	379,350	186,427	385,285	1.5

5.34: Number of Households and Planted Area by Improved Seed Use and District - Short Rainy Season

District	Improved Seed						% of area planted using improved seed
	Number of Households using Improved Seed	Planted Area Improved Seed Used	Number of Households NOT using Improved Seeds	Planted Area Improved Seed not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Babati	3,949	2,867	3,001	2,738	6,950	5,605	51.2
Hanang	0	0	2,535	1,717	2,535	1,717	0.0
Mbulu	1,241	486	2,896	2,142	4,137	2,628	18.5
Simanjiro	342	566	571	659	913	1,225	46.2
Kiteto	0	0	0	0	0	0	0
Total	5,533	3,919	9,004	7,256	14,536	11,175	35.1

5.35: Number of Households and Planted Area by Improved Seed Use and District - Long Rainy Season

District	Improved Seed						% of area planted using improved seed
	Number of Households using Improved Seed	Planted Area Improved Seed Used	Number of Households NOT using Improved Seeds	Planted Area Improved Seed not Used	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Babati	20,377	22,094	38,069	70,217	58,445	92,311	23.9
Hanang	7,119	7,751	32,278	68,388	39,397	76,140	10.2
Mbulu	13,860	9,445	26,685	41,487	40,545	50,932	18.5
Simanjiro	6,564	14,211	12,101	41,957	18,665	56,168	25.3
Kiteto	2,684	11,051	26,692	98,683	29,376	109,734	10.1
Total	50,603	64,552	135,824	320,733	186,427	385,285	16.8

5.36: Number of crop Growing Households and Planted Area (hectare) by Local Seed Use and District; 2007/08 Agriculture Year - Short Rainy Season

District	Using Local seed		Not using Local seed		TOTAL		% of Planted Area Using Local seeds
	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	
Babati	4,897	2,426	2,053	3,179	6,950	5,605	43.3
Hanang	2,535	1,703	0	15	2,535	1,717	99.1
Mbulu	3,930	2,131	207	496	4,137	2,628	81.1
Simanjiro	628	653	285	572	913	1,225	53.3
Kiteto	0	0	0	0	0	0	0
Total	11,990	6,913	2,546	4,262	14,536	11,175	61.9

5.37: Number of crop Growing Households and Planted Area (hectare) by Local Seed Use and District; 2007/08 Agriculture Year - Long Rainy Season

District	Using Local seed		Not using Local seed		TOTAL		% of Planted Area Using Local seeds
	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	
Babati	52,127	65,378	6,318	26,934	58,445	92,311	71
Hanang	38,226	64,817	1,170	11,394	39,397	76,140	85
Mbulu	38,683	40,405	1,862	10,677	40,545	50,932	79
Simanjiro	14,612	41,825	4,053	14,344	18,665	56,168	74
Kiteto	27,661	97,746	1,715	11,987	29,376	109,734	89
Total	171,310	310,171	15,118	75,336	186,427	385,285	81

5.38: Number of Households and Planted Area by Insecticides Use by District - SHORT RAINY SEASON

District	Insecticide Use						% of Planted area using Insecticides
	Number of Households using Insecticides	Planted Area Applied with Insecticides	Number of Households NOT using Insecticides	Planted Area Without Insecticides	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Babati	790	264	6,160	5,341	6,950	5,605	4.7
Hanang	1,073	809	1,463	908	2,535	1,717	47.1
Mbulu	0	0	4,137	2,628	4,137	2,628	0.0
Simanjiro	400	352	514	872	913	1,225	28.8
Kiteto	0	0	0	0	0	0	0
Total	2,262	1,426	12,274	9,749	14,536	11,175	12.8

5.39: Number of Households and Planted Area by Fungicide Use and District - Long Rainy Season

District	Insecticide Use						% of Planted area using Insecticides
	Number of Households using Insecticides	Planted Area Applied with Insecticides	Number of Households NOT using Insecticides	Planted Area Without Insecticides	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Babati	5,845	7,730	52,601	84,581	58,445	92,311	8.4
Hanang	3,121	3,360	36,276	72,780	39,397	76,140	4.4
Mbulu	1,138	831	39,407	50,101	40,545	50,932	1.6
Simanjiro	1,370	1,917	17,295	54,251	18,665	56,168	3.4
Kiteto	895	5,308	28,481	104,426	29,376	109,734	4.8
Total	12,367	19,146	174,060	366,139	186,427	385,285	5.0

5.40: Number of Households and Planted Area by Irrigation Use and District -SHORT RAINY SEASON

District	Irrigation use						% of area planted under irrigation in Short rainy season
	Number of Households using Irrigation	Planted Area with Irrigation	Number of Households NOT using Irrigation	Planted Area with no Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Babati	1,422	1,003	5,529	4,601	6,950	5,605	17.9
Hanang	0	0	2,535	1,717	2,535	1,717	0.0
Mbulu	724	390	3,413	2,238	4,137	2,628	14.8
Simanjiro	685	578	228	647	913	1,225	47.2
Kiteto	0	0	0	0	0	0	0
Total	2,831	1,971	11,706	9,203	14,536	11,175	17.6

5.41: Number of Households and Planted Area by Irrigation Use and District -LONG RAINY SEASON

District	Irrigation use						% of area planted under irrigation in long rainy season
	Number of Households using Irrigation	Planted Area with Irrigation	Number of Households NOT using Irrigation	Planted Area with no Irrigation	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Babati	2,685	1,570	55,760	90,741	58,445	92,311	1.7
Hanang	1,463	1,298	37,934	74,842	39,397	76,140	1.7
Mbulu	1,758	1,423	38,786	49,509	40,545	50,932	2.8
Simanjiro	1,199	1,085	17,466	55,083	18,665	56,168	1.9
Kiteto	0	0	29,376	109,734	29,376	109,734	0.0
Total	7,105	5,375	179,322	379,909	186,427	385,285	1.4

MARKETING

5.42: Number of Crop Producing households reporting Selling agricultural produce during 2007/08 by District and Season

District	SHORT RAINY SEASON				LONG RAINY SEASON				Total number of households
	Number of households that sold	%	Number of households that did not sale	%	Number of households that sold	%	Number of households that did not sale	%	
Babati	5,213	75	1,738	25	49,600	85	8,846	15	58,445
Hanang	2,048	81	488	19	30,425	77	8,971	23	39,397
Mbulu	3,620	88	517	13	26,478	65	14,067	35	40,545
Simanjiro	742	81	171	19	13,014	70	5,651	30	18,665
Kiteto	0	0	0	0	25,350	86	4,026	14	29,376
Total	11,623	80	2,914	20	144,867	78	41,561	22	186,427

INPUT USE SHORT RAINY SEASON

5.43: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON -Babati District

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	158	96	1,579,607	6,318	3,546	6,476	3,642	2.6
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		96	1,579,607		3,546		3,642	2.6
Cassava	158	32	1,579,607	0	0	158	32	100.0
Sweet Potato	0	0	0	474	48	474	48	0.0
Irish potatoes	316	64	2,211,450	474	96	790	160	40.0
Yams	0	0	0	0	0	0	0	0
Coco Yam	0	0	0	0	0	0	0	0
ROOTS & TUBERS		96	3,791,057		144	7,898	240	40.0
Mung Bean	0	0	0	0	0	0	0	0
Beans	0	0	0	4,423	1,535	4,423	1,535	0.0
Cowpeas	0	0	0	158	32	158	32	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	158	32	39,490	0	0	158	32	100.0
Field Peas	0	0	0	0	0	0	0	0
PULSES		32	39,490		1,567	4,739	1,599	2.0
Sunflower	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0
Castor Fung	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS		0	0		0		0	0
Okra	0	0	0	158	4	158	4	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	158	32	158	32	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	158	8	2,369,410	158	24	158	32	25.0
Spinach	158	4	39,490	0	0	158	4	100.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	316	12	2,408,901	158	24	316	36	33.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	158	16	631,843	0	0	158	16	100.0
FRUITS & VEGETABLES		40	5,449,644		84		124	32.5
Cotton	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0
Pyrethrum	0	0	0	0	0	0	0	0
Jute	0	0	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0	0	0
CASH CROPS		0	0	0	0	0	0	0.0
Total		264	10,859,798	18,797	5,341	20,219	5,605	4.7

5.44: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON -Babati District								
Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	158	96	1,579,607	6,318	3,546	6,476	3,642	2.6
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		96	1,579,607		3,546		3,642	2.6
Cassava	158	32	1,579,607	0	0	158	32	100.0
Sweet Potato	0	0	0	474	48	474	48	0.0
Irish potatoes	316	64	2,211,450	474	96	790	160	40.0
Yams	0	0	0	0	0	0	0	0
Coco Yam	0	0	0	0	0	0	0	0
ROOTS & TUBERS		96	3,791,057		144		240	40.0
Mung Bean	0	0	0	0	0	0	0	0
Beans	0	0	0	4,423	1,535	4,423	1,535	0.0
Cowpeas	0	0	0	158	32	158	32	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	158	32	39,490	0	0	158	32	100.0
Field Peas	0	0	0	0	0	0	0	0
PULSES		32	39,490		1,567		1,599	2.0
Sunflower	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0
Castor Fung	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS		0	0		0		0	0
Okra	0	0	0	158	4	158	4	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	158	32	158	32	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	158	8	2,369,410	158	24	158	32	25.0
Spinach	158	4	39,490	0	0	158	4	100.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	316	12	2,408,901	158	24	316	36	33.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	158	16	631,843	0	0	158	16	100.0
FRUITS & VEGETABLES		40	5,449,644		84		124	32.5
Cotton	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0
Pyrethrum	0	0	0	0	0	0	0	0
Jute	0	0	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0	0	0
CASH CROPS		0	0	0	0	0	0	0.0
Total		264	10,859,798		5,341		5,605	4.7

5.45: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON -Mbulu District

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	3,517	1,538	3,517	1,538	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	1,758	314	1,758	314	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		0	0		1,853		1,853	0.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	414	94	414	94	0.0
Irish potatoes	0	0	0	207	25	207	25	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0	0		119	5,896	119	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	3,413	643	3,413	643	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		0	0		643	3,413	643	0.0
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0		0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0		0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	103	13	103	13	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS		0	0	103	13	103	13	0.0
Total		0	0	14,687	2,628	14,687	2,628	0.0

**5.46: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year -
SHORT RAINY SEASON -Simanjiro District**

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	228	90	2,796,855	514	732	685	822	10.9
Paddy	114	185	9,246,745	57	81	171	266	69.6
Sorghum	57	35	1,598,203	57	12	57	46	75.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		309	13,641,803		824		1,133	27.3
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0	0		0	913	0	0.0
Mung Bean	0	0	0	0	0	0	0	0
Beans	171	43	1,997,754	171	48	285	91	47.2
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		43	1,997,754		48	285	91	47.2
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0		0	0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0		0	0.0
Cotton	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0
Pyrethrum	0	0	0	0	0	0	0	0
Jute	0	0	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0	0	0
CASH CROPS		0	0	0	0	0	0	0.0
Total		352	15,639,557	1,427	872	2,112	1,225	28.8

5.47: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON -Kiteto District

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	0	0	0	0	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		0	0		0		0	0.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0	0		0		0	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	0	0	0	0	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		0	0		0		0	0.0
Sunflower	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0
Castor Fung	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS		0	0		0		0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0		0	0.0
Cotton	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0
Pyrethrum	0	0	0	0	0	0	0	0
Jute	0	0	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0	0	0
CASH CROPS		0	0		0		0	0.0
Total		0	0		0		0	0.0

5.48: Planted Area & Number of Households by Fungicide Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Babati District

Crops	Fungicide Use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Fungicide Used	Cost of Fungicides	Number of Households NOT using Fungicide	Planted Area Fungicide not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	6,476	3,642	6,476	3,642	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		0	0		3,642		3,642	0.0
Cassava	0	0	0	158	32	158	32	0.0
Sweet Potato	0	0	0	474	48	474	48	0.0
Irish potatoes	474	96	3,506,727	316	64	790	160	60.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		96	3,506,727		144		240	40.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	4,423	1,535	4,423	1,535	0.0
Cowpeas	0	0	0	158	32	158	32	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	158	32	158	32	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		0	0		1,599		1,599	0.0
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0		0	0.0
Okra	0	0	0	158	4	158	4	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	158	32	1,184,705	0	0	158	32	100.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	158	8	2,369,410	158	24	158	32	25.0
Spinach	0	0	0	158	4	158	4	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	158	8	2,685,332	316	28	316	36	22.3
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	158	16	158	16	0.0
FRUITS & VEGETABLES		48	6,239,447		76		124	38.7
Cotton	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0
Pyrethrum	0	0	0	0	0	0	0	0
Jute	0	0	0	0	0	0	0	0
Seaweed	0	0	0	0	0	0	0	0
CASH CROPS		0	0		0		0	0.0
Total	0	144	9,746,175	13,111	5,461	13,743	5,605	2.6

5.49: Planted Area & Number of Households by Fungicide Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Hanang District

Crops	Fungicide Use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Fungicide Used	Cost of Fungicides	Number of Households NOT using Fungicide	Planted Area Fungicide not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	293	148	293	148	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS	0	0	0	0	148	0	148	0.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS	0	0	0	0	0	0	0	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	2,438	1,569	2,438	1,569	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES	0	0	0	0	1,569	0	1,569	0.0
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS	0	0	0	0	0	0	0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES	0	0	0	0	0	0	0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS	0	0	0	0	0	0	0	0.0
Total	0	0	0	2,730	1,717	2,730	1,717	0.0

5.50: Planted Area & Number of Households by Fungicide Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Mbulu District

Crops	Fungicide Use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Fungicide Used	Cost of Fungicides	Number of Households NOT using Fungicide	Planted Area Fungicide not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	3,517	1,538	3,517	1,538	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	1,758	314	1,758	314	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS	0	0	0	5,275	1,853	5,275	1,853	0.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	414	94	414	94	0.0
Irish potatoes	0	0	0	207	25	207	25	0.0
Yams	0	0	0	0	0	0	0	0
Coco Yam	0	0	0	0	0	0	0	0
ROOTS & TUBERS	0	0	0	621	119	621	119	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	3,413	643	3,413	643	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES	0	0	0	3,413	643	3,413	643	0.0
Sunflower	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0
Castor Fung	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	0	0	0	0	0	0	0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES	0	0	0	0	0	0	0	0.0
Cotton	0	0	0	0	0	0	0	0
Tobacco	0	0	0	103	13	103	13	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS	0	0	0	103	13	103	13	0.0
Total	0	0	0	9,412	2,628	9,412	2,628	0.0

5.51: Planted Area & Number of Households by Fungicide Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON -Simanjiro District

Crops	Fungicide Use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Fungicide Used	Cost of Fungicides	Number of Households NOT using Fungicide	Planted Area Fungicide not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	114	46	1,198,652	571	775	685	822	5.6
Paddy	57	139	856,180	114	127	171	266	52.2
Sorghum	0	0	0	57	46	57	46	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		185	2,054,832		949		1,133	16.3
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0	0		0		0	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	285	91	285	91	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		0	0		91		91	0.0
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0		0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0		0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS		0	0		0		0	0.0
Total	171	185	2,054,832	1,027	1,040	1,199	1,225	15.1

**5.52: Planted Area & Number of Households by Fungicide Use by Crop during 2007/08 agriculture year -
SHORT RAINY SEASON - Kiteto District**

Crops	Fungicide Use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Fungicide Used	Cost of Fungicides	Number of Households NOT using Fungicide	Planted Area Fungicide not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	0	0	0	0	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS	0	0	0	0	0	0	0	0.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0	0
Coco Yam	0	0	0	0	0	0	0	0
ROOTS & TUBERS	0	0	0	0	0	0	0	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	0	0	0	0	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES	0	0	0	0	0	0	0	0.0
Sunflower	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0
Castor Fung	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	0	0	0	0	0	0	0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES	0	0	0	0	0	0	0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS	0	0	0	0	0	0	0	0.0
Total	0	0	0	0	0	0	0	0.0

5.53: Planted Area & Number of Households by Irrigation Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Babati District

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Irrigated	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,106	719	5,371	2,923	6,476	3,642	19.8
Paddy	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0.0
CEREALS		719		2,923		3,642	19.8
Cassava	0	0	158	32	158	32	0.0
Sweet Potato	0	0	474	48	474	48	0.0
Irish potatoes	0	0	790	160	790	160	0.0
Yams	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0		240		240	0.0
Mung Bean	0	.	0	.	0	0	0.0
Beans	158	160	4,265	1,375	4,423	1,535	10.4
Cowpeas	0	0	158	32	158	32	0.0
Green gram	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0.0
Bambaranuts	158	32	0	0	158	32	100.0
Field Peas	0	0	0	0	0	0	0.0
PULSES		192		1,407		1,599	12.0
Sunflower	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0		0		0	0.0
Okra	158	4	0	0	158	4	100.0
Radish	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0.0
Onion	0	0	158	32	158	32	0.0
Ginger	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0.0
Tomatoes	158	32	0	0	158	32	100.0
Spinach	158	4	0	0	158	4	100.0
Carrot	0	0	0	0	0	0	0.0
Chillies	316	36	0	0	316	36	100.0
Amaranths	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0.0
Water Mellon	158	16	0	0	158	16	100.0
FRUITS & VEGETABLES		92		32		124	74.2
Cotton	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0.0
CASH CROPS		0		0		0	0.0
Total		1,003		4,601		5,605	17.9

5.54: Planted Area & Number of Households by Irrigation Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Hanang District

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Irrigated	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	293	148	293	148	0.0
Paddy	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0.0
CEREALS	0	0	293	148	293	148	0.0
Cassava	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0.0
ROOTS & TUBERS	0	0	0	0	0	0	0.0
Mung Bean	0	0	0	0	0	0	0.0
Beans	1	0	1	0	2	0	0.0
Cowpeas	2	0	2	0	4	0	0.0
Green gram	3	0	3	0	6	0	0.0
Chick peas	4	0	4	0	8	0	0.0
Bambaranuts	5	0	5	0	10	0	0.0
Field Peas	6	0	6	0	12	0	0.0
PULSES	21	0	21	1,569	21	1,569	0.0
Sunflower	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS	0	0	0	0	0	0	0.0
Okra	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0.0
Zukkin	0	0	0	0	0	0	0.0
Star Fruit	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES	0	0	0	0	0	0	0.0
Cotton	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0.0
CASH CROPS	0	0	0	0	0	0	0.0
Total	0	0	293	1,717	293	1,717	0.0

5.55: Planted Area & Number of Households by Irrigation Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Babati District

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Irrigated	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,106	719	5,371	2,923	6,476	3,642	19.8
Paddy	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0.0
CEREALS		719		2,923		3,642	19.8
Cassava	0	0	158	32	158	32	0.0
Sweet Potato	0	0	474	48	474	48	0.0
Irish potatoes	0	0	790	160	790	160	0.0
Yams	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0		240		240	0.0
Mung Bean	0	.	0	.	0	0	0.0
Beans	158	160	4,265	1,375	4,423	1,535	10.4
Cowpeas	0	0	158	32	158	32	0.0
Green gram	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0.0
Bambaranuts	158	32	0	0	158	32	100.0
Field Peas	0	0	0	0	0	0	0.0
PULSES		192		1,407		1,599	12.0
Sunflower	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0		0		0	0.0
Okra	158	4	0	0	158	4	100.0
Radish	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0.0
Onion	0	0	158	32	158	32	0.0
Ginger	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0.0
Tomatoes	158	32	0	0	158	32	100.0
Spinach	158	4	0	0	158	4	100.0
Carrot	0	0	0	0	0	0	0.0
Chillies	316	36	0	0	316	36	100.0
Amaranths	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0.0
Water Mellon	158	16	0	0	158	16	100.0
FRUITS & VEGETABLES		92		32		124	74.2
Cotton	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0.0
CASH CROPS		0		0		0	0.0
Total		1,003		4,601		5,605	17.9

**5.56: Planted Area & Number of Households by Irrigation Use by Crop during 2007/08 agriculture year -
SHORT RAINY SEASON - Mbulu District**

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Irrigated	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	621	214	2,896	1,325	3,517	1,538	13.9
Paddy	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0.0
Wheat	621	86	1,138	228	1,758	314	27.5
Barley	0	0	0	0	0	0	0.0
CEREALS		300		1,553		1,853	16.2
Cassava	0	0	0	0	0	0	0.0
Sweet Potato	103	21	310	73	414	94	22.2
Irish potatoes	103	9	103	16	207	25	37.5
Yams	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0.0
ROOTS & TUBERS		30		89		119	25.4
Mung Bean	0	0	0	0	0	0	0.0
Beans	621	60	2,793	584	3,413	643	9.3
Cowpeas	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0.0
PULSES		60		584		643	9.3
Sunflower	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0		0		0	0.0
Okra	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0		0		0	0.0
Cotton	0	0	0	0	0	0	0.0
Tobacco	0	0	103	13	103	13	0.0
Pyrethrum	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0.0
CASH CROPS		0		13		13	0.0
Total		390		2,238		2,628	14.8

5.57: Planted Area & Number of Households by Irrigation Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Simanjiro District

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Irrigated	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	457	225	228	596	685	822	27.4
Paddy	171	266	0	0	171	266	0.0
Sorghum	57	46	0	0	57	46	0.0
Bulrush Millet	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0.0
CEREALS		537		596		1,133	47.4
Cassava	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0		0		0	0.0
Mung Bean	0	0	0	0	0	0	0.0
Beans	171	40	114	51	285	91	44.3
Cowpeas	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0.0
PULSES		40		51		91	44.3
Sunflower	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0		0		0	0.0
Okra	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0		0		0	0.0
Cotton	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0.0
CASH CROPS		0		0		0	0.0
Total		578		647		1,225	47.2

5.58: Planted Area & Number of Households by Irrigation Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Kiteto District

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Irrigated	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	0	0	0	0.0
Paddy	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0.0
CEREALS	0	0	0	0	0	0	0.0
Cassava	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	1.0
Irish potatoes	0	0	0	0	0	0	2.0
Yams	0	0	0	0	0	0	3.0
Coco Yam	0	0	0	0	0	0	0.0
ROOTS & TUBERS	0	0	0	0	0	0	0.0
Mung Bean	0	.	0	.	0	0	0.0
Beans	1	.	1	.	0	0	0.0
Cowpeas	2	.	2	.	0	0	0.0
Green gram	3	.	3	.	0	0	0.0
Chick peas	4	.	4	.	0	0	0.0
Bambaranuts	5	.	5	.	0	0	0.0
Field Peas	0	0	0	0	0	0	0.0
PULSES	0	0	0	0	0	0	0.0
Sunflower	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS	0	0	0	0	0	0	0.0
Okra	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES	0	0	0	0	0	-	0.0
Cotton	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0.0
CASH CROPS	0	0	0	0	0	0	0.0
Total	0	0	0	0	0	0	0.0

5.59: Planted Area & Number of Households by Improved Seeds Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Babati District

Crop	Improved Seed							% of area planted using improved seed
	Number of Households using Improved Seed	Planted Area Improved Seed Used	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Improved Seed not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	3,633	2,139	114,608,381	2,843	1,503	6,476	3,642	58.74
Paddy	0	0	0	0	0	0	0	0.00
Sorghum	0	0	0	0	0	0	0	0.00
Bulrush Millet	0	0	0	0	0	0	0	0.00
Finger Millet	0	0	0	0	0	0	0	0.00
Wheat	0	0	0	0	0	0	0	0.00
Barley	0	0	0	0	0	0	0	0.00
CEREALS		2,139	114,608,381		1,503		3,642	58.74
Cassava	158	32	7,582,113	0	0	158	32	100.00
Sweet Potato	0	0	0	474	48	474	48	0.00
Irish potatoes	790	160	66,817,373	0	0	790	160	100.00
Yams	0	0	0	0	0	0	0	0.00
Coco Yam	0	0	0	0	0	0	0	0.00
ROOTS & TUBERS		192	74,399,487		48		240	80.00
Mung Bean	0	0	0	0	0	0	0	0.00
Beans	1,422	432	20,692,851	3,001	1,103	4,423	1,535	28.13
Cowpeas	0	0	0	158	32	158	32	0.00
Green gram	0	0	0	0	0	0	0	0.00
Chick peas	0	0	0	0	0	0	0	0.00
Bambaranuts	0	0	0	0	0	0	0	0.00
Field Peas	0	0	0	0	0	0	0	0.00
PULSES		432	20,692,851		1,135	4,581	1,567	27.55
Sunflower	0	0	0	0	0	0	0	0.00
Simsim	0	0	0	0	0	0	0	0.00
Groundnut	0	0	0	0	0	0	0	0.00
Soya Beans	0	0	0	0	0	0	0	0.00
Castor Fung	0	0	0	0	0	0	0	0.00
OIL SEEDS & OIL NUTS		0	0		0		0	0.00
Okra	0	0	0	158	4	158	4	0.00
Radish	0	0	0	0	0	0	0	0.00
Turmeric	0	0	0	0	0	0	0	0.00
Bitteer Aubergine	0	0	0	0	0	0	0	0.00
Onion	0	0	0	158	32	158	32	0.00
Ginger	0	0	0	0	0	0	0	0.00
Cabbage	0	0	0	0	0	0	0	0.00
Tomatoes	158	32	0	0	0	0	0	0.00
Spinach	158	4	0	0	0	0	0	0.00
Carrot	0	0	0	0	0	0	0	0.00
Chillies	316	36	0	0	0	0	0	0.00
Amaranths	0	0	0	0	0	0	0	0.00
Pumpkins	0	0	0	0	0	0	0	0.00
Cucumber	0	0	0	0	0	0	0	0.00
Egg Plant	0	0	0	0	0	0	0	0.00
Water Mellon	0	0	0	158	16	158	0	0.00
FRUITS & VEGETABLES		72	0		52		36	201.79
Cotton	0	0	0	0	0	0	0	0.00
Tobacco	0	0	0	0	0	0	0	0.00
Pyrethrum	0	0	0	0	0	0	0	0.00
Jute	0	0	0	0	0	0	0	0.00
Seaweed	0	0	0	0	0	0	0	0.00
CASH CROPS		0	0		0		0	0.00
Total		2,835	209,700,718		2,738		5,484	51.7

5.60: Planted Area & Number of Households by Improved Seeds Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Hanang District

Crop	Improved Seed							% of area planted using improved seed
	Number of Households using Improved Seed	Planted Area Improved Seed Used	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Improved Seed not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	293	148	293	148	0.00
Paddy	0	0	0	0	0	0	0	0.00
Sorghum	0	0	0	0	0	0	0	0.00
Bulrush Millet	0	0	0	0	0	0	0	0.00
Finger Millet	0	0	0	0	0	0	0	0.00
Wheat	0	0	0	0	0	0	0	0.00
Barley	0	0	0	0	0	0	0	0.00
CEREALS		0	0		148		148	0.00
Cassava	0	0	0	0	0	0	0	0.00
Sweet Potato	0	0	0	0	0	0	0	0.00
Irish potatoes	0	0	0	0	0	0	0	0.00
Yams	0	0	0	0	0	0	0	0.00
Coco Yam	0	0	0	0	0	0	0	0.00
ROOTS & TUBERS		0	0		0		0	0.00
Mung Bean	0	0	0	0	0	0	0	0.00
Beans	0	0	0	2,438	1,569	803,383	1,569	0.00
Cowpeas	0	0	0	0	0	0	0	0.00
Green gram	0	0	0	0	0	0	0	0.00
Chick peas	0	0	0	0	0	0	0	0.00
Bambaranuts	0	0	0	0	0	0	0	0.00
Field Peas	0	0	0	0	0	0	0	0.00
PULSES		0	0		1,569		1,569	0.00
Sunflower	0	0	0	0	0	0	0	0.00
Simsim	0	0	0	0	0	0	0	0.00
Groundnut	0	0	0	0	0	0	0	0.00
Soya Beans	0	0	0	0	0	0	0	0.00
Castor Fung	0	0	0	0	0	0	0	0.00
OIL SEEDS & OIL NUTS		0	0		0		0	0.00
Okra	0	0	0	0	0	0	0	0.00
Radish	0	0	0	0	0	0	0	0.00
Turmeric	0	0	0	0	0	0	0	0.00
Bitteer Aubergine	0	0	0	0	0	0	0	0.00
Kothmir	0	0	0	0	0	0	0	0.00
Onion	0	0	0	0	0	0	0	0.00
Ginger	0	0	0	0	0	0	0	0.00
Zukkin	0	0	0	0	0	0	0	0.00
Star Fruit	0	0	0	0	0	0	0	0.00
Cabbage	0	0	0	0	0	0	0	0.00
Tomatoes	0	0	0	0	0	0	0	0.00
Spinach	0	0	0	0	0	0	0	0.00
Carrot	0	0	0	0	0	0	0	0.00
Chillies	0	0	0	0	0	0	0	0.00
Amaranths	0	0	0	0	0	0	0	0.00
Pumpkins	0	0	0	0	0	0	0	0.00
Cucumber	0	0	0	0	0	0	0	0.00
Egg Plant	0	0	0	0	0	0	0	0.00
Water Mellon	0	0	0	0	0	0	0	0.00
FRUITS & VEGETABLES		0	0		0		0	0.00
Cotton	0	0	0	0	0	0	0	0.00
Tobacco	0	0	0	0	0	0	0	0.00
Pyrethrum	0	0	0	0	0	0	0	0.00
Jute	0	0	0	0	0	0	0	0.00
Seaweed	0	0	0	0	0	0	0	0.00
CASH CROPS		0	0		0		0	0.00
Total		0	0	2,730	1,717		1,717	0.00

5.63: Planted Area & Number of Households by Improved Seeds Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Kiteto District

Crop	Improved Seed							% of area planted using improved seed
	Number of Households using Improved Seed	Planted Area Improved Seed Used	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Improved Seed not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	0	0	0	0	0.00
Paddy	0	0	0	0	0	0	0	0.00
Sorghum	0	0	0	0	0	0	0	0.00
Bulrush Millet	0	0	0	0	0	0	0	0.00
Finger Millet	0	0	0	0	0	0	0	0.00
Wheat	0	0	0	0	0	0	0	0.00
Barley	0	0	0	0	0	0	0	0.00
CEREALS		0	0		0		0	0.00
Cassava	0	0	0	0	0	0	0	0.00
Sweet Potato	0	0	0	0	0	0	0	0.00
Irish potatoes	0	0	0	0	0	0	0	0.00
Yams	0	0	0	0	0	0	0	0.00
Coco Yam	0	0	0	0	0	0	0	0.00
ROOTS & TUBERS		0	0		0		0	0.00
Mung Bean	0	0	0	0	0	0	0	0.00
Beans	0	0	0	0	0	0	0	0.00
Cowpeas	0	0	0	0	0	0	0	0.00
Green gram	0	0	0	0	0	0	0	0.00
Chick peas	0	0	0	0	0	0	0	0.00
Bambaranuts	0	0	0	0	0	0	0	0.00
Field Peas	0	0	0	0	0	0	0	0.00
PULSES		0	0		0		0	0.00
Sunflower	0	0	0	0	0	0	0	0.00
Simsim	0	0	0	0	0	0	0	0.00
Groundnut	0	0	0	0	0	0	0	0.00
Soya Beans	0	0	0	0	0	0	0	0.00
Castor Fung	0	0	0	0	0	0	0	0.00
OIL SEEDS & OIL NUTS		0	0		0		0	0.00
Okra	0	0	0	0	0	0	0	0.00
Radish	0	0	0	0	0	0	0	0.00
Turmeric	0	0	0	0	0	0	0	0.00
Bitter Aubergine	0	0	0	0	0	0	0	0.00
Onion	0	0	0	0	0	0	0	0.00
Ginger	0	0	0	0	0	0	0	0.00
Cabbage	0	0	0	0	0	0	0	0.00
Tomatoes	0	0	0	0	0	0	0	0.00
Spinach	0	0	0	0	0	0	0	0.00
Carrot	0	0	0	0	0	0	0	0.00
Chillies	0	0	0	0	0	0	0	0.00
Amaranths	0	0	0	0	0	0	0	0.00
Pumpkins	0	0	0	0	0	0	0	0.00
Cucumber	0	0	0	0	0	0	0	0.00
Egg Plant	0	0	0	0	0	0	0	0.00
Water Mellon	0	0	0	0	0	0	0	0.00
FRUITS & VEGETABLES		0	0		0		0	0.00
Cotton	0	0	0	0	0	0	0	0.00
Tobacco	0	0	0	0	0	0	0	0.00
Pyrethrum	0	0	0	0	0	0	0	0.00
Jute	0	0	0	0	0	0	0	0.00
Seaweed	0	0	0	0	0	0	0	0.00
CASH CROPS		0	0		0		0	0.00
Total		0	0		0		0	0.00

5.65: Planted Area & Number of Households by Local Seeds Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Hanang District

Crop	Local Seed							% of area planted using Local seed
	Number of Households using Local Seed	Planted Area Local Seed Used	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Local Seed not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	293	141	1,316,467	0	7	293	148	95.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		141	1,316,467		7	293	148	95.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0	0		0	0	0	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	2,438	1,562	52,804,967	0	7	2,438	1,569	99.5
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		1,562	52,804,967		7	2,438	1,569	99.5
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0	0	0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0	0	0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS		0	0		0	0	0	0.0
Total		1,703	54,121,434		15	2,730	1,717	99.1

5.68: Planted Area & Number of Households by Local Seeds Use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - Mainland

Crop	Local Seed							% of area planted using Local seed
	Number of Households using Local Seed	Planted Area Local Seed Used	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Local Seed not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	0	0	0	0	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		0	0		0	0	0	0.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0	0		0	0	0	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	0	0	0	0	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		0	0		0	0	0	0.0
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0	0	0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0	0	0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS		0	0		0	0	0	0.0
Total		0	0		0	0	0	0.0

5.75: Planted Area & Number of Households by Herbicide Use by Crop - SHORT RAINY SEASON - Hanang District

Crop	Herbicide use							% of area planted under Herbicide in SHORT rainy season
	Number of Households using Herbicide	Planted Area with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area with no Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	293	148	293	148	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		0	0		148	293	148	0.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0	0		0	0	0	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	2,438	1,569	2,438	1,569	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		0	0		1,569	2,438	1,569	0.0
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0	0	0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0	0	0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS		0	0		0	0	0	0.0
Total		0	0		1,717	2,730	1,717	0.0

5.76: Planted Area & Number of Households by Herbicide Use by Crop - SHORT RAINY SEASON - Mbulu District

	Number of Households using Herbicide	Planted Area with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area with no Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	3,517	1,538	3,517	1,538	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	1,758	314	1,758	314	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		0	0		1,853		1,853	0.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	414	94	414	94	0.0
Irish potatoes	0	0	0	207	25	207	25	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0	0		119		119	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	3,413	643	3,413	643	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		0	0		643		643	0.0
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0		0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0		0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	103	13	103	13	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS		0	0		13		13	0.0
Total		0	0		2,628		2,628	0.0

5.77: Planted Area & Number of Households by Herbicide Use by Crop - SHORT RAINY SEASON - Simanjiro District

Crop	Herbicide use							% of area planted under Herbicide in SHORT rainy season
	Number of Households using Herbicide	Planted Area with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area with no Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	514	230	7,933,936	514	592	1,027	822	28.0
Paddy	57	81	1,712,360	114	185	171	266	30.4
Sorghum	57	35	742,023	57	12	114	46	75.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		345	10,388,319		788	1,313	1,133	30.5
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	0.0
Irish potatoes	0	0	0	0	0	0	0	0.0
Yams	0	0	0	0	0	0	0	0.0
Coco Yam	0	0	0	0	0	0	0	0.0
ROOTS & TUBERS		0	0		0	0	0	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	228	53	2,568,540	228	38	457	91	58.2
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		53	2,568,540		38	457	91	58.2
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0	0	0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0	0	0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0	0.0
Pyrethrum	0	0	0	0	0	0	0	0.0
Jute	0	0	0	0	0	0	0	0.0
Seaweed	0	0	0	0	0	0	0	0.0
CASH CROPS		0	0		0	0	0	0.0
Total		399	12,956,859		826	1,769	1,225	32.5

5.78: Planted Area & Number of Households by Herbicide Use by Crop - SHORT RAINY SEASON - Kiteto District

Crop	Herbicide use							% of area planted under Herbicide in SHORT rainy season
	Number of Households using Herbicide	Planted Area with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area with no Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	0	0	0	0	0.0
Paddy	0	0	0	0	0	0	0	0.0
Sorghum	0	0	0	0	0	0	0	0.0
Bulrush Millet	0	0	0	0	0	0	0	0.0
Finger Millet	0	0	0	0	0	0	0	0.0
Wheat	0	0	0	0	0	0	0	0.0
Barley	0	0	0	0	0	0	0	0.0
CEREALS		0	0		0	0	0	0.0
Cassava	0	0	0	0	0	0	0	0.0
Sweet Potato	0	0	0	0	0	0	0	1.0
Irish potatoes	0	0	0	0	0	0	0	2.0
Yams	0	0	0	0	0	0	0	3.0
Coco Yam	0	0	0	0	0	0	0	4.0
ROOTS & TUBERS		0	0		0	0	0	0.0
Mung Bean	0	0	0	0	0	0	0	0.0
Beans	0	0	0	0	0	0	0	0.0
Cowpeas	0	0	0	0	0	0	0	0.0
Green gram	0	0	0	0	0	0	0	0.0
Chick peas	0	0	0	0	0	0	0	0.0
Bambaranuts	0	0	0	0	0	0	0	0.0
Field Peas	0	0	0	0	0	0	0	0.0
PULSES		0	0		0	0	0	0.0
Sunflower	0	0	0	0	0	0	0	0.0
Simsim	0	0	0	0	0	0	0	0.0
Groundnut	0	0	0	0	0	0	0	0.0
Soya Beans	0	0	0	0	0	0	0	0.0
Castor Fung	0	0	0	0	0	0	0	0.0
OIL SEEDS & OIL NUTS		0	0		0	0	0	0.0
Okra	0	0	0	0	0	0	0	0.0
Radish	0	0	0	0	0	0	0	0.0
Turmeric	0	0	0	0	0	0	0	0.0
Bitteer Aubergine	0	0	0	0	0	0	0	0.0
Onion	0	0	0	0	0	0	0	0.0
Ginger	0	0	0	0	0	0	0	0.0
Cabbage	0	0	0	0	0	0	0	0.0
Tomatoes	0	0	0	0	0	0	0	0.0
Spinach	0	0	0	0	0	0	0	0.0
Carrot	0	0	0	0	0	0	0	0.0
Chillies	0	0	0	0	0	0	0	0.0
Amaranths	0	0	0	0	0	0	0	0.0
Pumpkins	0	0	0	0	0	0	0	0.0
Cucumber	0	0	0	0	0	0	0	0.0
Egg Plant	0	0	0	0	0	0	0	0.0
Water Mellon	0	0	0	0	0	0	0	0.0
FRUITS & VEGETABLES		0	0		0	0	0	0.0
Cotton	0	0	0	0	0	0	0	0.0
Tobacco	0	0	0	0	0	0	0	1.0
Pyrethrum	0	0	0	0	0	0	0	2.0
Jute	0	0	0	0	0	0	0	3.0
Seaweed	0	0	0	0	0	0	0	4.0
CASH CROPS		0	0		0	0	0	0.0
Total		0	0		0	0	0	0.0

PERMANENT CROPS

**6.1 : Number and Percentage of Households Planting Permanent Crops by District , 2007/08
Agriculture Year**

District	Have Crops/Fruit Trees		Does Not Have Crops/Fruit Trees		Total	
	Number	%	Number	%	Number	%
Babati	37,121	58.2	26,695	41.8	63,816	100.0
Hanang	5,168	13.1	34,326	86.9	39,494	100.0
Mbulu	3,517	8.4	38,373	91.6	41,889	100.0
Simanjiro	228	1.0	22,889	99.0	23,117	100.0
Kiteto	5,219	17.3	24,977	82.7	30,196	100.0
Total	51,253	26	147,259	74.2	198,513	100.0

6.2: Planted Area and Area Harvested by Type of Planting and District

District	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)
	Number of household	Area	Number of household	Area	Number of household	Area	
Babati	7,898	3,988	29,855	29,135	36,647	33,122	17,612
Hanang	1,950	649	3,218	1,083	5,071	1,731	1,656
Mbulu	1,758	305	1,862	542	3,517	848	482
Simanjiro	114	45	114	16	228	61	58
Kiteto	2,908	2,080	2,460	2,101	5,219	4,181	4,161
Total	14,629	7,066	37,509	32,877	50,682	39,943	23,969

6.3: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop-Babati District							
Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Cashewnut	316	23	3	16	15,796	5.00	5,000.00
Banana	3,159	142	3	1,410	1,409,641	421.87	421,869.98
Coffee	0	0	0	0	0	.00	.00
Mango	2,211	144	4	486	485,887	128.50	128,503.95
Pigeon pea	34,593	31,893	17,262	14,973	14,972,620	.87	867.39
Coconut	0	0	0	0	0	.00	.00
Orange	2,527	149	6	469	468,511	74.15	74,150.00
Sisal	0	0	0	0	0	.00	.00
Sugar	790	152	142	100	100,147	.71	706.30
Cane							
Palm Oil	0	0	0	0	0	.00	.00
Tea	0	0	0	0	0	.00	.00
Cassava	0	0	0	0	0	.00	.00
Cloves	0	0	0	0	0	.00	.00
Other	8,056	620	192	2,043	2,042,748	10.66	10,655.36
Total	51,653	33,122	17,612	19,495	19,495,351	1.11	1,106.95

6.4: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop-Hanang District							
Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Cashewnut	0	0	0	0	0	.00	.00
Banana	195	8	8	10	10,239	1.33	1,333.50
Coffee	0	0	0	0	0	.00	.00
Mango	0	0	0	0	0	.00	.00
Pigeon pea	4,973	1,723	1,648	1,119	1,119,290	.68	679.01
Coconut	0	0	0	0	0	.00	.00
Orange	98	0	0	0	0	.00	.00
Sisal	0	0	0	0	0	.00	.00
Sugar	0	0	0	0	0	.00	.00
Cane							
Palm Oil	0	0	0	0	0	.00	.00
Tea	0	0	0	0	0	.00	.00
Cassava	0	0	0	0	0	.00	.00
Cloves	0	0	0	0	0	.00	.00
Other	0	0	0	0	0	.00	.00
Total	5,266	1,731	1,656	1,130	1,129,529	.68	682.05

6.5: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop-Mbulu District							
Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Cashewnut	0	0	0	0	0	.00	.00
Banana	1,758	127	120	1,391	1,390,522	11.63	11,634.18
Coffee	0	0	0	0	0	.00	.00
Mango	414	16	1	13	13,239	12.80	12,800.00
Pigeon pea	1,551	655	341	303	302,742	.89	887.34
Coconut	0	0	0	0	0	.00	.00
Orange	207	9	5	62	62,058	12.70	12,700.00
Sisal	0	0	0	0	0	.00	.00
Sugar	0	0	0	0	0	.00	.00
Cane							
Palm Oil	0	0	0	0	0	.00	.00
Tea	0	0	0	0	0	.00	.00
Cassava	0	0	0	0	0	.00	.00
Cloves	0	0	0	0	0	.00	.00
Other	1,138	42	15	212	212,033	13.87	13,868.83
Total	5,068	848	482	1,981	1,980,594	4.11	4,109.91

6.6: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop-Simanjiro District							
Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Cashewnut	0	0	0	0	0	.00	.00
Banana	57	3	0	2	1,712	.00	.00
Coffee	0	0	0	0	0	.00	.00
Mango	0	0	0	0	0	.00	.00
Pigeon pea	57	13	13	6	5,708	.42	423.33
Coconut	0	0	0	0	0	.00	.00
Orange	0	0	0	0	0	.00	.00
Sisal	0	0	0	0	0	.00	.00
Sugar	0	0	0	0	0	.00	.00
Cane							
Palm Oil	0	0	0	0	0	.00	.00
Tea	0	0	0	0	0	.00	.00
Cassava	0	0	0	0	0	.00	.00
Cloves	0	0	0	0	0	.00	.00
Other	114	45	45	149	149,261	3.32	3,321.05
Total	228	61	58	157	156,681	2.68	2,681.65

6.7: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop-Kiteto District							
Crop	Total Area Planted (ha)		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Cashewnut	0	0	0	0	0	.00	.00
Banana	149	2	1	14	13,793	9.40	9,398.00
Coffee	0	0	0	0	0	.00	.00
Mango	75	7	0	18	17,894	.00	.00
Pigeon pea	4,995	4,123	4,109	1,895	1,895,348	.46	461.23
Coconut	0	0	0	0	0	.00	.00
Orange	0	0	0	0	0	.00	.00
Sisal	0	0	0	0	0	.00	.00
Sugar	0	0	0	0	0	.00	.00
Cane							
Palm Oil	0	0	0	0	0	.00	.00
Tea	0	0	0	0	0	.00	.00
Cassava	0	0	0	0	0	.00	.00
Cloves	0	0	0	0	0	.00	.00
Other	298	50	50	20	20,131	.40	403.41
Total	5,517	4,181	4,161	1,947	1,947,166	.47	467.99

6.8: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Manyara Region

District	Cashewnut								Banana							
	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Babati	0	0	316	23	316	23	3	16	474	57	2,843	84	3,159	142	3	1,410
Hanang	0	0	0	0	0	0	0	0	195	8	0	.	195	8	8	10
Mbulu	0	0	0	0	0	0	0	0	931	110	931	17	1,758	127	120	1,391
Simanjiro	0	0	0	0	0	0	0	0	0	.	57	3	57	3	.	2
Kiteto	0	0	0	0	0	0	0	0	0	.	149	2	149	2	1	14
Total	0	0	316	23	316	23	3	16	1,600	175	3,980	105	5,319	281	132	2,826

Cont. Table 6.8: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Manyara Region

District	Coffee								Mango							
	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Babati	0	0	0	0	0	0	0	0	0	.	2,211	144	2,211	144	4	486
Hanang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0	0	0	414	16	414	16	1	13
Simanjiro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0	0	0	75	7	75	7	.	18
Total	0	0	0	0	0	0	0	0	0	.	2,700	167	2,700	167	5	517

Cont. Table 6.8: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Manyara Region

District	Pigeon pea								Coconut							
	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Babati	6,950	3,702	27,643	28,192	34,593	31,893	17,262	14,973								
Hanang	1,755	641	3,218	1,082	4,973	1,723	1,648	1,119								
Mbulu	724	175	827	479	1,551	655	341	303								
Simanjiro	0	.	57	13	57	13	13	6								
Kiteto	2,833	2,072	2,311	2,050	4,995	4,123	4,109	1,895								
Total	12,263	6,590	34,057	31,817	46,171	38,407	23,374	18,296	0	0	0	0	0	0	0	0

Cont. Table 6.8: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Manyara Region

District	Orange								Sisal							
	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Babati	0	.	2,527	149	2,527	149	6	469	0	0	0	0	0	0	0	0
Hanang	0	.	98	0	98	0	.	0	0	0	0	0	0	0	0	0
Mbulu	103	5	103	4	207	9	5	62	0	0	0	0	0	0	0	0
Simanjiro									0	0	0	0	0	0	0	0
Kiteto									0	0	0	0	0	0	0	0
Total	103	5	2,728	153	2,832	158	11	531	0	0	0	0	0	0	0	0

Cont. Table 6.8: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Manyara Region

District	Sugar Cane								Palm Oil							
	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Babati	474	142	316	10	790	152	142	100	0	.	0	.	0	.	.	.
Hanang	0	0	0	0	0	0	0	0	0	.	0	.	0	.	.	.
Mbulu	0	0	0	0	0	0	0	0	0	.	0	.	0	.	.	.
Simanjiro	0	0	0	0	0	0	0	0	0	.	0	.	0	.	.	.
Kiteto	0	0	0	0	0	0	0	0	0	.	0	.	0	.	.	.
Total	474	142	316	10	790	152	142	100	0	.	0	.	0	.	.	.

Cont. Table 6.8: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Manyara Region

District	Tea								Cassava							
	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Babati	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Cont. Table 6.8: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Manyara Region

District	Cloves								Other							
	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Babati	0	0	0	0	0	0	0	0	790	87	7,266	533	8,056	620	192	2,043
Hanang	0	0	0	0	0	0	0	0								
Mbulu	0	0	0	0	0	0	0	0	310	15	931	27	1,138	42	15	212
Simanjiro	0	0	0	0	0	0	0	0	114	45	0	.	114	45	45	149
Kiteto	0	0	0	0	0	0	0	0	75	7	224	43	298	50	50	20
Total	0	0	0	0	0	0	0	0	1,289	154	8,421	602	9,606	757	302	2,424

ACCESS TO EQUIPMENTS

7.1: Number of Agriculture Households that used Agricultural Equipment/Asset by type and District for 2007/08 agriculture year

District	Equipment/Asset Name												Total number of Agricultural Households
	Sword		Hand Hoe		Hand Sprayer		Grater, Chipper, Oil Press na Oil Mill		Oxplough		Oxplanter		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	62,868	17.5	62,868	17.5	13,585	3.8	790	0.2	23,220	6.5	948	0.3	358,969
Hanang	38,129	18.5	38,909	18.9	5,948	2.9	585	0.3	22,136	10.8	1,073	0.5	205,547
Mbulu	39,407	16.2	41,062	16.9	4,654	1.9	207	0.1	17,066	7.0	414	0.2	242,708
Simanjiro	20,605	6.2	20,491	6.2	4,852	1.5	228	0.1	3,824	1.2	285	0.1	330,779
Kiteto	26,543	8.9	29,301	9.8	2,013	0.7	149	0.0	1,342	0.4	75	0.0	298,421
Total	187,552	94.5	192,632	97.0	31,052	15.6	1,959	1.0	67,589	34.0	2,794	1.4	198,513

Cont. 7.1: Number of Agriculture Households that used Agricultural Equipment/Asset by type and District for 2007/08 agriculture year

District	Equipment/Asset Name												Total number of Agricultural Households
	Ox cart		Trekta		Tractor plough		Tractor Harrow		Castrated bulls		Uncastrated bulls		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	8,846	2.5	790	0.2	632	0.2	1,422	0.4	21,799	6.1	15,954	4.4	358,969
Hanang	11,117	5.4	878	0.4	585	0.3	878	0.4	16,968	8.3	19,113	9.3	205,547
Mbulu	7,654	3.2	517	0.2	103	0.0	310	0.1	15,825	6.5	18,824	7.8	242,708
Simanjiro	1,541	0.5	2,626	0.8	1,769	0.5	742	0.2	4,338	1.3	3,824	1.2	330,779
Kiteto	1,417	0.5	2,013	0.7	1,566	0.5	0	0.0	2,311	0.8	2,162	0.7	298,421
Total	30,574	15.4	6,823	3.4	4,656	2.3	3,352	1.7	61,241	30.8	59,878	30.2	198,513

Cont. 7.1: Number of Agriculture Households that used Agricultural Equipment/Asset by type and District for 2007/08 agriculture year

District	Equipment/Asset Name										Total number of Agricultural Households
	Cow		Donkey		Thrasher		Power tiller		Rigder		
	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	17,534	4.9	4,423	1.2	474	0.1	158	0.0	790	0.2	358,969
Hanang	17,455	8.5	7,899	3.8	390	0.2	195	0.1	195	0.1	205,547
Mbulu	17,376	7.2	3,930	1.6	103	0.0	103	0.0	103	0.0	242,708
Simanjiro	4,566	1.4	1,941	0.6	171	0.1	0	0.0	57	0.0	330,779
Kiteto	2,237	0.7	895	0.3	1,044	0.3	0	0.0	0	0.0	298,421
Total	59,168	29.8	19,087	9.6	2,182	1.1	456	0.2	1,145	0.6	198,513

7.2: Number of Agricultural Equipment/Asset owned by type and District for 2007/08 agriculture year

District	Equipment/Asset Name											
	Sword		Hand Hoe		Hand Sprayer		Grater, Chipper, Oil Press na Oil Mill		Oxplough		Oxplanter	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	102,043	17.7	195,555	34.0	15,164	2.6	790	.1	27,959	4.9	5,055	.9
Hanang	74,015	14.1	152,710	29.2	7,314	1.4	975	.2	30,815	5.9	3,218	.6
Mbulu	58,128	13.6	139,114	32.6	7,344	1.7	207	.0	21,203	5.0	414	.1
Simanjiro	43,094	21.2	68,152	33.5	6,507	3.2	285	.1	7,021	3.5	742	.4
Kiteto	48,388	22.8	85,966	40.6	2,237	1.1	149	.1	4,101	1.9	149	.1
Total	325,668	16.8	641,498	33.0	38,565	2.0	2,406	.1	91,099	4.7	9,578	.5

Cont. 7.2: Number of Agricultural Equipment/Asset owned by type and District for 2007/08 agriculture year

District	Equipment/Asset Name											
	Ox cart		Trekta		Tractor plough		Tractor Harrow		Castrated bulls		Uncastrated bulls	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	8,846	1.5	3,791	.7	1,422	.2	2,843	.5	79,296	13.8	52,443	9.1
Hanang	14,920	2.9	1,560	.3	1,365	.3	4,778	.9	61,435	11.7	65,336	12.5
Mbulu	12,205	2.9	5,275	1.2	103	.0	3,413	.8	43,131	10.1	49,233	11.5
Simanjiro	1,598	.8	2,854	1.4	1,941	1.0	1,084	.5	17,009	8.4	10,331	5.1
Kiteto	1,640	.8	3,504	1.7	1,715	.8	0	.	13,793	6.5	10,736	5.1
Total	39,209	2.0	16,984	.9	6,546	.3	12,119	.6	214,665	11.1	188,079	9.7

Cont. 7.2: Number of Agricultural Equipment/Asset owned by type and District for 2007/08 agriculture year

District	Equipment/Asset Name									
	Cow		Donkey		Thrasher		Power tiller		Rigder	
	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	65,080	11.3	7,424	1.3	3,949	.7	158	.0	4,107	.7
Hanang	82,986	15.9	19,016	3.6	2,340	.4	390	.1	195	.0
Mbulu	74,367	17.4	10,343	2.4	103	.0	2,275	.5	103	.0
Simanjiro	31,051	15.3	8,562	4.2	1,427	.7	0	.	1,712	.8
Kiteto	32,582	15.4	3,355	1.6	3,579	1.7	0	.	0	.
Total	286,065	14.7	48,700	2.5	11,399	.6	2,823	.1	6,118	.3

7.3: Number of Agricultural Households that Used Tractors/Draft animals to cultivate Land By Type and District for 2007/08 agriculture year- Manyara Region

District	Oxen		Bulls		Cows		Donkeys		Tractor		Power Tiller	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	38,700	57.4	18,797	27.9	474	.7	1,580	2.3	7,740	11.5	158	.2
Hanang	25,842	53.0	14,042	28.8	488	1.0	6,436	13.2	1,853	3.8	98	.2
Mbulu	18,721	47.4	15,515	39.3	1,655	4.2	2,275	5.8	1,138	2.9	207	.5
Simanjiro	2,911	18.6	1,256	8.0	571	3.6	1,998	12.8	8,790	56.2	114	.7
Kiteto	2,460	16.3	298	2.0	75	.5	1,715	11.3	10,587	70.0	0	.0
Total	88,635	47.5	49,908	26.8	3,262	1.7	14,004	7.5	30,108	16.1	576	.3

7.4: Number of Tractors/Draft animals Owned by Type and District for 2007/08 agriculture year

District	Oxen		Bulls		Cows		Donkeys		Tractor		Power Tiller	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	63,816	40.5	38,700	24.6	50,863	32.3	3,317	2.1	632	.4	158	.1
Hanang	55,389	28.5	44,565	22.9	75,965	39.1	17,455	9.0	878	.5	0	.
Mbulu	35,063	26.3	35,890	26.9	53,991	40.4	8,171	6.1	207	.2	207	.2
Simanjiro	14,327	27.2	7,534	14.3	21,233	40.3	6,907	13.1	2,740	5.2	0	.
Kiteto	8,798	22.3	5,219	13.3	19,012	48.3	2,088	5.3	4,101	10.4	149	.4
Total	177,393	30.7	131,909	22.8	221,065	38.3	37,938	6.6	8,557	1.5	514	.1

IRRIGATION

7.5: Number of Agricultural Households reporting use of Irrigation during 2007/08 agricultural Year by District - Manyara Region

District	Households practicing irrigation		Households not practicing irrigation		Total Number of Households	
	Number	%	Number	%	Number	%
Babati	5,371	8.4	58,445	91.6	63,816	100.0
Hanang	780	2.0	38,714	98.0	39,494	100.0
Mbulu	827	2.0	41,062	98.0	41,889	100.0
Simanjiro	1,827	7.9	21,290	92.1	23,117	100.0
Kiteto	75	.2	30,122	99.8	30,196	100.0
Total	8,879	4.5	189,633	95.5	198,513	100

Table 7.6: Number of Agricultural Households using irrigation by Source of Irrigation Water by District during the 2007/08 agricultural Year - Manyara Region

District	Main Source of Irrigation Water							Total
	River	Borehole	Lake	Canal	Dam	Tap Water	Well	
Babati	2,527	158	158	158	0	948	948	4,897
Hanang	98	98	0	0	0	98	195	488
Mbulu	414	0	0	103	0	0	0	517
Simanjiro	1,370	0	0	0	0	457	0	1,827
Kiteto	0	0	0	0	0	0	0	0
Total	4,408	255	158	261	0	1,502	1,143	7,728

Table 7.7: Number of Agricultural Households by method of used to obtain water and District during 2007/08 agriculture year- Manyara Region

District	Main method of Obtaining Water					Total
	Gravity	Hand bucket	Hand pump	motor pump	Other	
Babati	3,159	1,422	316	0	0	4,897
Hanang	195	195	98	0	0	488
Mbulu	414	103	0	0	0	517
Simanjiro	1,827	0	0	0	0	1,827
Kiteto	0	0	0	0	0	0
Total	5,594	1,720	0	413	0	7,728

EROSION CONTROL

7.8: Number of Households with Soil Erosion Problem on their Land by District - Manyara Region

District	Have any erosion problem on their farming land		Do not have any erosion problem on their farming land		Total	
	Number	%	Number	%	Number	%
Babati	24,326	38.1	39,490	61.9	63,816	100.0
Hanang	7,314	18.5	32,180	81.5	39,494	100.0
Mbulu	12,101	28.9	29,788	71.1	41,889	100.0
Simanjiro	3,596	15.6	19,521	84.4	23,117	100.0
Kiteto	5,368	17.8	24,828	82.2	30,196	100.0
Total	52,705	26.6	145,807	73.4	198,513	100.00

7.9: Number of Households with Erosion Control/Water Harvesting Facilities on their Land By District - Manyara Region

District	Presence of Erosion Control/Water Harvesting Facilities					
	Have any erosion control/water harvesting facilities		Do not have any erosion control/water harvesting facilities		Total	
	Number	%	Number	%	Number	%
Babati	21,957	34.4	41,860	65.6	63,816	100.0
Hanang	4,973	12.6	34,521	87.4	39,494	100.0
Mbulu	11,584	27.7	30,305	72.3	41,889	100.0
Simanjiro	2,626	11.4	20,491	88.6	23,117	100.0
Kiteto	2,088	6.9	28,108	93.1	30,196	100.0
Total	43,227	22	155,285	78	198,513	100

7.10: Number of Erosion Control/Water Harvesting Structures by Type and District as of 2007/08 agriculture year- Manyara Region

District	Terraces	Erosion Control Bunds	Gabions / Sandbag	Vetiver Grass	Tree Belts	Water Harvesting Bunds	Drainage Ditches	Others
Babati	37,595	19,745	0	3,317	4,423	3,001	11,847	158
Hanang	20,576	6,241	0	0	390	1,560	1,658	0
Mbulu	12,929	19,445	0	827	6,620	2,999	16,445	0
Simanjiro	7,021	16,267	571	0	0	0	571	0
Kiteto	3,057	2,088	0	0	0	447	2,460	0
Total	81,177	63,786	571	4,145	11,433	8,008	32,982	158

AGRICULTURE CREDIT

**8.1: Number of Agricultural Households receiving Credits by District During the 2007/08
Agriculture Year - Manyara Region**

District	Households Receiving Credit					
	Borrowed money for agriculture		Did not borrow money for agriculture		Total	
	Number	%	Number	%	Number	%
Babati	3,159	5.0	60,657	95.0	63,816	100.0
Hanang	780	2.0	38,714	98.0	39,494	100.0
Mbulu	414	1.0	41,476	99.0	41,889	100.0
Simanjiro	228	1.0	22,889	99.0	23,117	100.0
Kiteto	969	3.2	29,227	96.8	30,196	100.0
Total	5,551	2.8	192,962	97.2	198,513	100

**8.2: Number of Credits by sex of the household Member receiving credit from source B by District During the
2007/08 Agriculture Year- Manyara Region**

District	Male		Female		Total	
	Number	%	Number	%	Number	%
Babati	2,369	75.0	790	25.0	3,159	100.0
Hanang	683	87.5	98	12.5	780	100.0
Mbulu	310	75.0	103	25.0	414	100.0
Simanjiro	171	75.0	57	25.0	228	100.0
Kiteto	298	30.8	671	69.2	969	100.0
Total	3,832	63	1,719	37	5,551	100

8.3: Number of Households receiving Credits by Main Source of credit and District During the 2007/08 Agriculture Year - Manyara Region

District	Family, friend or relative		Bank		Savings & credit Soc		Cooperative		Trader/trade store		Private individual		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	948	30.0	474	15.0	158	5.0	1,422	45.0	0	0.0	0	0.0	3,159	100
Hanang	0	0.0	0	0.0	293	37.5	195	25.0	195	25.0	0	0.0	780	100
Mbulu	103	25.0	0	0.0	0	0.0	103	25.0	0	0.0	207	50.0	414	100
Simanjiro	0	0.0	0	0.0	57	25.0	171	75.0	0	0.0	0	0.0	228	100
Kiteto	0	0.0	75	7.7	149	15.4	224	23.1	298	30.8	224	23.1	969	100
Total	1,051	18.9	548	9.9	657	11.8	2,115	38.1	493	8.9	431	7.8	5,551	100

8.4: Number of Households Reporting the Main reasons for Not Using Credit by District During the 2007/08 Agriculture Year- Manyara Region

District	Not needed		Not available		Did not want to go into debt		Interest rate/cost too high		Did not know how to get credit		Difficult bureaucratic procedure		Credit granted too late		Other (specify)		Dont know about credit		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	8,372	2.4	9,162	2.6	9,320	2.6	1,580	0.4	22,746	6.4	474	0.1	632	0.2	0	0.0	8,372	2.4	352,794	17
Hanang	3,511	1.7	4,486	2.2	4,973	2.5	780	0.4	14,237	7.1	488	0.2	98	0.0	0	0.0	10,142	5.0	201,814	19
Mbulu	5,172	2.2	5,482	2.3	3,517	1.5	1,034	0.4	14,894	6.2	207	0.1	414	0.2	207	0.1	10,550	4.4	238,621	17
Simanjiro	1,256	0.4	2,854	0.9	3,311	1.0	342	0.1	10,845	3.3	0	0.0	913	0.3	0	0.0	3,368	1.0	329,001	7
Kiteto	2,162	0.7	3,206	1.1	3,579	1.2	671	0.2	11,855	4.0	1,566	0.5	522	0.2	0	0.0	5,666	1.9	294,317	10
Total	20,472	10.6	25,189	13.1	24,699	12.8	4,408	2.3	74,577	38.7	2,734	1.4	2,578	1.3	207	0.1	38,098	19.8	192,595	100

8.5: Number of Households receiving Credits by Main Source of credit B and District During the 2007/08 Agriculture Year- Manyara Region

District	Family, friend or relative		Bank		Savings & credit Soc		Cooperative		Savings & credit Soc		Trader/trade store		Private individual		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	0	0.0	790	83.3	0	0.0	349	36.8	0	0.0	0	0.0	0	0.0	948	120
Hanang	0	0.0	0	0.0	98	50.0	0	0.0	0	0.0	0	0.0	0	0.0	195	50
Mbulu	103	50.0	0	0.0	0	0.0	108	52.3	149	72.2	0	0.0	103	50.0	207	224
Simanjiro	0	0.0	0	0.0	57	100.0	270	473.8	0	0.0	0	0.0	0	0.0	57	574
Kiteto	75	25.0	0	0.0	0	0.0	585	196.1	175	58.8	0	0.0	224	75.0	298	355
Total	178	10.4	790	46.3	155	9.1	413	24.2	353	20.7	0	0.0	327	19.2	1,705	130

8.6: Number of Households receiving Credits by Main Source of credit C and District During the 2007/08 Agriculture Year- Manyara Region

District	Family, friend or relative		Bank		Savings & credit Soc		Cooperative		Savings & credit Soc		Trader/trade store		Private individual		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	158	16.7	0	0.0	316	33.3	0	0.0	158	16.7	316	33.3	0	0.0	948	100
Hanang	0	0.0	0	0.0	0	0.0	0	0.0	98	50.0	98	50.0	0	0.0	195	100
Mbulu	103	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	103	50.0	207	100
Simanjiro	0	0.0	0	0.0	57	100.0	0	0.0	0	0.0	0	0.0	0	0.0	57	100
Kiteto	75	33.3	75	33.3	0	0.0	75	33.3	0	0.0	0	0.0	0	0.0	224	100
Total	336	20.6	75	4.6	373	22.9	75	4.6	255	15.7	413	25.4	103	6.3	1,630	100

**8.7: Provision of credit A by sex and District During the 2007/08 Agriculture Year-
Manyara Region**

District	Male		Female		Total	
	Number	%	Number	%	Number	%
Babati	2,369	75	790	25	3,159	100
Hanang	683	88	98	13	780	100
Mbulu	310	75	103	25	414	100
Simanjiro	171	75	57	25	228	100
Kiteto	298	31	671	69	969	100
Total	3,832	69	1,719	31	5,551	100

**8.8 : Provision of credit B by sex and District During the 2007/08 Agriculture Year -
Manyara Region**

District	Male		Female		Total	
	Number	%	Number	%	Number	%
Babati	790	83	158	17	948	100
Hanang	98	50	98	50	195	100
Mbulu	103	50	103	50	207	100
Simanjiro	0	0	57	100	57	100
Kiteto	0	0	224	100	224	100
Total	991	61	640	39	1,630	100

**8.9 : Provision of credit C by sex and District During the 2007/08 Agriculture Year-
Manyara Region**

District	Male		Female		Total	
	Number	%	Number	%	Number	%
Babati	948	100	0	0	948	100
Hanang	98	50	98	50	195	100
Mbulu	103	50	103	50	207	100
Simanjiro	0	0	57	100	57	100
Kiteto	75	25	224	75	298	100
Total	1,223	72	482	28	1,705	100

CROP EXTENSION

9.1: Number of Agriculture Households that received Crop Advice During the 2007/08 Agriculture Year - Manyara Region

District	Households that received Crop Advices		Households that did NOT receive Crop advices		Crop Growing Households
	Number	%	Number	%	
Babati	58,761	16.4	299,745	83.6	358,506
Hanang	30,132	17.4	143,540	82.6	173,673
Mbulu	34,856	14.5	206,152	85.5	241,008
Simanjiro	15,069	4.6	312,347	95.4	327,415
Kiteto	19,683	6.6	277,280	93.4	296,963
Total	158,502	82.0	34,786	18.0	193,288

9.2: Number of Agriculture Households Participated in Out Grower Agreement During the 2007/08 Agriculture Year- Manyara Region

District	Number of Households Participated in Out Grower Agreement		Number of Households NOT Participated in Out Grower Agreement		Total Number of Households	
	Number	%	Number	%	Number	%
Babati	2,527	4.0	61,289	96.0	63,816	100
Hanang	98	0.2	39,397	99.8	39,494	100
Mbulu	621	1.5	41,269	98.5	41,889	100
Simanjiro	913	4.0	22,204	96.0	23,117	100
Kiteto	1,044	3.5	29,152	96.5	30,196	100
Total	5,203	2.6	193,310	97.4	198,513	100

9.3: Number of Agriculture Households Participated in Contract Production Agreement During the 2007/08 - Manyara Region

District	Number of Hholds Participated in Production Agreement		Number of Hholds NOT Participated in Production Agreement		Total Number of Households	
	Number	%	Number	%	Number	%
Babati	1,106	1.7	62,710	98.3	63,816	100
Hanang	195	0.5	39,299	99.5	39,494	100
Mbulu	310	0.7	41,579	99.3	41,889	100
Simanjiro	400	1.7	22,717	98.3	23,117	100
Kiteto	224	0.7	29,972	99.3	30,196	100
Total	2,234	1.1	196,278	98.9	198,513	100

9.4: Number of Agriculture Households By Source of Extension Messages By District During the 2007/08 Agriculture Year - Manyara Region

District	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		Total Households that received advices
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	358,887	82.3	12,163	2.8	7,582	1.7	4,265	1.0	17,850	4.1	34,435	7.9	948	0.2	436,129
Hanang	157,781	87.4	4,583	2.5	488	0.3	780	0.4	3,608	2.0	13,262	7.3	0	0.0	180,502
Mbulu	201,897	93.5	1,345	0.6	0	0.0	1,655	0.8	931	0.4	9,826	4.6	207	0.1	215,860
Simanjiro	81,280	86.5	6,164	6.6	913	1.0	685	0.7	2,283	2.4	2,626	2.8	57	0.1	94,009
Kiteto	116,013	89.6	3,206	2.5	0	0.0	596	0.5	3,952	3.1	5,368	4.1	298	0.2	129,433
Total	154,286	97.3	16,405	10.3	5,068	3.2	6,133	3.9	16,009	10.1	36,628	23.1	1,352	0.9	158,502

9.5: Number of households receiving extension advice on Spacing by District during the 2007/08 agriculture year - Manyara Region

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	51,021	92.6	632	1.1	632	1.1	158	0.3	1,106	2.0	1,580	2.9	0	0.0	55,128
Hanang	22,916	95.5	585	2.4	0	0.0	98	0.4	293	1.2	98	0.4	0	0.0	23,989
Mbulu	29,271	97.9	103	0.3	0	0.0	103	0.3	0	0.0	414	1.4	0	0.0	29,891
Simanjiro	11,815	92.4	342	2.7	0	0.0	57	0.4	342	2.7	228	1.8	0	0.0	12,786
Kiteto	14,464	92.8	224	1.4	0	0.0	75	0.5	298	1.9	373	2.4	149	1.0	15,583
Total	129,488	94.3	1,887	1.4	632	0.5	491	0.4	2,039	1.5	2,692	2.0	149	0.1	137,377

9.6: Number of households receiving extension advice on Use of Agrochemicals by District during the 2007/08 agriculture year - Manyara Region

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	35,857	87.0	474	1.1	790	1.9	158	0.4	1,580	3.8	2,369	5.7	0	0.0	41,228
Hanang	12,190	81.2	780	3.6	0	0.0	98	0.6	98	0.6	1,853	12.3	0	0.0	15,017
Mbulu	19,031	95.8	103	2.6	0	0.0	0	0.0	207	1.0	517	2.6	0	0.0	19,859
Simanjiro	8,276	92.4	342	3.3	57	0.6	57	0.6	171	1.9	0	0.0	57	0.6	8,961
Kiteto	8,872	93.7	75	3.3	0	0.0	0	0.0	373	3.9	149	1.6	0	0.0	9,469
Total	84,227	89.1	1,774	1.9	847	0.9	313	0.3	2,428	2.6	4,888	5.2	57	0.1	94,534

9.7: Number of households receiving extension advice on Erosion Control by District during the 2007/08 agriculture year- Manyara Region

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	42,018	82.4	1,896	2.6	632	1.2	158	0.3	1,106	2.2	5,055	9.9	158	0.3	51,021
Hanang	16,285	72.6	98	2.6	0	0.0	98	0.4	293	1.3	5,656	25.2	0	0.0	22,429
Mbulu	24,099	86.6	103	2.6	0	0.0	414	1.5	207	0.7	2,896	10.4	103	0.4	27,823
Simanjiro	6,450	83.7	628	2.6	114	1.5	57	0.7	342	4.4	114	1.5	0	0.0	7,706
Kiteto	12,078	90.5	746	2.6	0	0.0	0	0.0	298	2.2	149	1.1	75	0.6	13,346
Total	100,872	90.3	2,784	2.6	1,042	0.9	261	0.2	1,589	1.4	5,199	4.7	0	0.0	111,747

9.8: Number of households receiving extension advice on use of Inorganic Fertilizer by District during the 2007/08 agriculture year - Manyara Region

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	29,539	85.0	1,106	3.2	158	0.5	316	0.9	1,264	3.6	2,369	6.8	0	0.0	34,751
Hanang	14,530	89.2	390	2.4	98	0.6	0	0.0	878	5.4	390	2.4	0	0.0	16,285
Mbulu	13,446	96.3	207	1.5	0	0.0	0	0.0	103	0.7	207	1.5	0	0.0	13,963
Simanjiro	6,107	87.7	514	7.4	114	1.6	57	0.8	171	2.5	0	0.0	0	0.0	6,964
Kiteto	8,649	93.5	224	2.4	0	0.0	0	0.0	373	4.0	0	0.0	0	0.0	9,245
Total	72,271	89.0	2,440	3.0	370	0.5	373	0.5	2,789	3.4	2,966	3.7	0	0.0	81,209

9.9: Number of households receiving extension advice on Use of Improved Seeds by District during the 2007/08 agriculture year - Manyara Region

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	44,703	87.3	1,264	2.5	790	1.5	790	1.5	948	1.9	2,527	4.9	158	0.3	51,179
Hanang	24,282	94.3	293	1.1	0	0.0	195	0.8	293	1.1	683	2.7	0	0.0	25,744
Mbulu	27,823	97.5	103	0.4	0	0.0	0	0.0	103	0.4	517	1.8	0	0.0	28,547
Simanjiro	9,475	86.5	685	6.3	114	1.0	114	1.0	285	2.6	285	2.6	0	0.0	10,959
Kiteto	14,241	93.6	298	2.0	0	0.0	149	1.0	373	2.5	149	1.0	0	0.0	15,210
Total	120,523	91.6	2,643	2.0	904	0.7	1,248	0.9	2,002	1.5	4,162	3.2	158	0.1	131,639

9.10: Number of households receiving extension advice on Mechanization and Labor Saving Technologies by District during the 2007/08 agriculture year- Manyara Region

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	28,591	79.7	2,211	6.2	316	0.9	474	1.3	2,211	6.2	2,053	5.7	0	0	35,857
Hanang	16,870	92.5	293	1.6	0	0	98	0.5	195	1.1	780	4.3	0	0	18,236
Mbulu	19,238	90.3	103	0.5	0	0	517	2.4	103	0.5	1,241	5.8	103	0.5	21,307
Simanjiro	8,333	77.2	1,427	13.2	57	0.5	114	1.1	285	2.6	571	5.3	0	0	10,788
Kiteto	11,929	89.9	224	1.7	0	0	224	1.7	373	2.8	522	3.9	0	0	13,271
Total	84,962	85.4	4,258	4.3	373	0.4	1,426	1.4	3,168	3.2	5,167	5.2	103	0.1	99,459

9.11: Number of households receiving extension advice on Irrigation Technologies by District during the 2007/08 agriculture year- Manyara Region

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	18,639	70.2	632	2.4	0	0.0	790	3.0	11,924	44.9	1,896	7.1	0	0.0	26,537
Hanang	4,681	78.7	195	3.3	387	6.5	98	1.6	2,013	33.8	683	11.5	0	0.0	5,948
Mbulu	7,447	94.7	103	1.3	1,323	16.8	103	1.3	5,961	75.8	207	2.6	0	0.0	7,861
Simanjiro	5,480	85.0	571	8.8	1,244	19.3	0	0.0	5,505	85.4	400	6.2	0	0.0	6,450
Kiteto	6,263	91.3	149	2.2	157	2.3	75	1.1	4,981	72.6	149	2.2	0	0.0	6,859
Total	42,510	79.2	1,650	3.1	729	1.4	1,065	2.0	4,368	8.1	3,334	6.2	0	0.0	53,656

9.12: Number of households receiving extension advice on Crop Storage by District during the 2007/08 agriculture year - Manyara Region

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	35,857	78.8	948	2.1	2,211	4.9	316	0.7	1,896	4.2	4,107	9.0	158	0.3	45,493
Hanang	22,039	95.4	0	0.0	0	0.0	98	0.4	98	0.4	878	3.8	0	0.0	23,111
Mbulu	22,858	92.9	0	0.0	0	0.0	414	1.7	103	0.4	1,241	5.0	0	0.0	24,616
Simanjiro	8,790	85.6	628	6.1	228	2.2	114	1.1	171	1.7	342	3.3	0	0.0	10,274
Kiteto	12,824	86.0	373	2.5	0	0.0	75	0.5	373	2.5	1,267	8.5	0	0.0	14,912
Total	102,368	86.5	1,948	1.6	2,440	2.1	1,016	0.9	2,641	2.2	7,836	6.6	158	0.1	118,406

9.13: Number of households receiving extension advice on Vermin Control by District during the 2007/08 agriculture year-Manyara Region

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	24,642	67.8	1,106	3.0	632	1.7	790	2.2	2,053	5.7	6,792	18.7	316	0.9	36,331
Hanang	10,142	89.7	195	1.7	98	0.9	0	0.0	98	0.9	780	6.9	0	0.0	11,312
Mbulu	12,619	84.1	414	2.8	0	0.0	0	0.0	103	0.7	1,862	12.4	0	0.0	14,997
Simanjiro	7,820	89.5	285	3.3	57	0.7	0	0.0	171	2.0	400	4.6	0	0.0	8,733
Kiteto	9,543	78.5	373	3.1	0	0.0	0	0.0	522	4.3	1,715	14.1	0	0.0	12,153
Total	64,765	77.5	2,373	2.8	786	0.9	790	0.9	2,948	3.5	11,549	13.8	316	0.4	83,526

AGRICULTURE CONSTRAINTS

10.1: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
	Number	%	Number	%	Number	%	Number	%
Babati	11,531	18.1	4,739	7.4	9,952	15.6	8,056	12.6
Hanang	8,679	22.0	683	1.7	6,826	17.3	2,535	6.4
Mbulu	6,102	14.6	931	2.2	9,205	22.0	6,102	14.6
Simanjiro	3,710	16.0	628	2.7	4,338	18.8	171	.7
Kiteto	5,741	19.0	895	3.0	7,381	24.4	1,118	3.7
Total	35,764	18.0	7,875	4.0	37,702	19.0	17,983	9.1

Cont. Table 10.1: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
	Number	%	Number	%	Number	%	Number	%
Babati	2,843	4.5	1,106	1.7	474	.7	12,005	18.8
Hanang	2,145	5.4	0	.0	195	.5	9,459	24.0
Mbulu	3,827	9.1	103	.2	103	.2	5,896	14.1
Simanjiro	1,084	4.7	457	2.0	400	1.7	2,397	10.4
Kiteto	2,535	8.4	224	.7	75	.2	1,044	3.5
Total	12,435	6.3	1,889	1.0	1,246	.6	30,801	15.5

Cont. Table 10.1: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
	Number	%	Number	%	Number	%	Number	%
Babati	948	1.5	0	0.00	0	0.00	2,053	3.2
Hanang	1,755	4.4	0	0.00	0	0.00	1,658	4.2
Mbulu	1,138	2.7	103	0.25	0	0.00	621	1.5
Simanjiro	514	2.2	114	0.49	285	1.23	856	3.7
Kiteto	1,044	3.5	0	0.00	0	0.00	3,653	12.1
Total	5,398	2.7	218	0.11	285	0.14	8,841	4.5

Cont. Table 10.1: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing		Harvesting	
	Number	%	Number	%	Number	%	Number	%
Babati	1,896	3.0	316	0.5	0	0.0	0	0.0
Hanang	683	1.7	2,243	5.7	0	0.0	0	0.0
Mbulu	931	2.2	207	0.5	0	0.0	0	0.0
Simanjiro	1,027	4.4	628	2.7	57	0.2	114	0.5
Kiteto	1,715	5.7	0	0.0	75	0.2	0	0.0
Total	6,251	3.1	3,394	1.7	132	0.1	114	0.1

Cont. Table 10.1: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Crop Storage		Crop Processing		Marketing Information		Higher Transport Costs	
	Number	%	Number	%	Number	%	Number	%
Babati	158	0.2	158	0.2	790	1.2	316	0.5
Hanang	0	0.0	0	0.0	293	0.7	293	0.7
Mbulu	0	0.0	0	0.0	1,034	2.5	414	1.0
Simanjiro	114	0.5	0	0.0	285	1.2	57	0.2
Kiteto	0	0.0	0	0.0	75	0.2	298	1.0
Total	272	0.1	158	0.1	2,477	1.2	1,378	0.7

Cont. Table 10.1: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation	
	Number	%	Number	%	Number	%	Number	%
Babati	1,580	2.5	0	0.0	1,580	2.5	158	0.2
Hanang	98	0.2	0	0.0	585	1.5	0	0.0
Mbulu	103	0.2	103	0.2	2,379	5.7	0	0.0
Simanjiro	913	4.0	57	0.2	1,084	4.7	0	0.0
Kiteto	1,193	4.0	0	0.0	298	1.0	0	0.0
Total	3,887	2.0	161	0.1	5,926	3.0	158	0.1

Cont. Table 10.1: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint					
	Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
	Number	%	Number	%	Number	%
Babati	69,770	19.44	3,577	1.00	358,969	100.00
Hanang	29,501	14.36	351	0.17	205,425	100.00
Mbulu	46,050	18.99	492	0.20	242,513	100.00
Simanjiro	48,770	14.75	1,576	0.48	330,676	100.00
Kiteto	18,756	6.28	11,646	3.90	298,457	100.00
Total	10,934	5.51	2,833	1.43	198,513	100.00

10.2: Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
	Number	%	Number	%	Number	%	Number	%
Babati	4,107	6.44	1,896	2.97	9,320	14.60	8,056	12.62
Hanang	1,755	4.44	975	2.47	6,436	16.30	3,121	7.90
Mbulu	2,172	5.19	1,345	3.21	4,448	10.62	7,240	17.28
Simanjiro	571	2.47	970	4.20	2,854	12.35	571	2.47
Kiteto	1,342	4.44	2,237	7.41	5,816	19.26	1,193	3.95
Total	9,947	5.01	7,422	3.74	28,873	14.54	20,180	10.17

Cont. Table 10.2: Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
	Number	%	Number	%	Number	%	Number	%
Babati	8,214	12.87	1,422	2.23	1,422	2.23	11,057	17.33
Hanang	5,656	14.32	585	1.48	1,365	3.46	8,289	20.99
Mbulu	5,896	14.07	414	0.99	931	2.22	7,757	18.52
Simanjiro	2,454	10.62	400	1.73	571	2.47	3,425	14.81
Kiteto	3,802	12.59	149	0.49	820	2.72	3,430	11.36
Total	26,022	13.11	2,969	1.50	5,109	2.57	33,958	17.11

Cont. Table 10.2: Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
	Number	%	Number	%	Number	%	Number	%
Babati	1,580	2.48	0	0.00	0	0.00	790	1.24
Hanang	2,925	7.41	0	0.00	0	0.00	878	2.22
Mbulu	2,379	5.68	0	0.00	0	0.00	931	2.22
Simanjiro	742	3.21	342	1.48	228	0.99	1,256	5.43
Kiteto	895	2.96	0	0.00	0	0.00	2,535	8.40
Total	8,521	4.29	342	0.17	228	0.12	6,389	3.22

Cont. Table 10.2: Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing		Harvesting	
	Number	%	Number	%	Number	%	Number	%
Babati	4,897	7.67	790	1.24	158	0.25	0	0.00
Hanang	1,658	4.20	1,853	4.69	98	0.25	0	0.00
Mbulu	2,793	6.67	207	0.49	207	0.49	0	0.00
Simanjiro	1,256	5.43	628	2.72	57	0.25	0	0.00
Kiteto	2,535	8.40	522	1.73	75	0.25	0	0.00
Total	13,138	6.62	3,999	2.01	594	0.30	0	0.00

Cont. Table 10.2: Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Crop Storage		Crop Processing		Marketing Information		Higher Transport Costs	
	Number	%	Number	%	Number	%	Number	%
Babati	948	1.5	316	.5	1,264	2.0	632	1.0
Hanang	195	.5	0	.0	1,365	3.5	585	1.5
Mbulu	414	1.0	207	.5	1,448	3.5	621	1.5
Simanjiro	285	1.2	0	.0	514	2.2	400	1.7
Kiteto	0	.0	0	.0	373	1.2	746	2.5
Total	1,842	.9	523	.3	4,963	2.5	2,983	1.5

Cont. Table 10.2: Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint							
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation	
	Number	%	Number	%	Number	%	Number	%
Babati	1,422	2.2	316	.5	1,580	2.5	158	.2
Hanang	98	.2	98	.2	683	1.7	0	.0
Mbulu	310	.7	0	.0	103	.2	0	.0
Simanjiro	1,941	8.4	228	1.0	1,027	4.4	0	.0
Kiteto	820	2.7	373	1.2	746	2.5	75	.2
Total	4,590	2.3	1,015	.5	4,139	2.1	233	.1

Cont. Table 10.2: Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year - Manyara Region

District	Constraint					
	Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
	Number	%	Number	%	Number	%
Babati	3,317	5.2	158	.2	63,816	100.0
Hanang	878	2.2	0	.0	39,494	100.0
Mbulu	1,965	4.7	103	.2	41,889	100.0
Simanjiro	2,226	9.6	171	.7	23,117	100.0
Kiteto	522	1.7	1,193	4.0	30,196	100.0
Total	8,908	4.5	1,626	.8	198,513	100.0

10.3: Number of Agricultural Households Reporting the THIRD Most important Constraint by District, 2007/08 Agricultural Year

District	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
	Number	%	Number	%	Number	%	Number	%
Babati	2,843	4.46	1,264	1.98	5,687	8.91	6,634	10.40
Hanang	1,268	3.21	488	1.23	4,193	10.62	2,925	7.41
Mbulu	931	2.22	414	0.99	4,344	10.37	5,172	12.35
Simanjiro	400	1.73	400	1.73	1,313	5.68	228	0.99
Kiteto	1,118	3.70	596	1.98	4,399	14.57	1,491	4.94
Total	6,560	3.30	3,161	1.59	19,936	10.04	16,451	8.29

Cont. Table 10.3: Number of Agricultural Households Reporting the THIRD Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
	Number	%	Number	%	Number	%	Number	%
Babati	5,371	8.42	3,159	4.95	1,738	2.72	11,373	17.82
Hanang	4,291	10.86	683	1.73	2,633	6.67	6,631	16.79
Mbulu	5,482	13.09	931	2.22	931	2.22	8,481	20.25
Simanjiro	1,484	6.42	400	1.73	457	1.98	3,196	13.83
Kiteto	2,684	8.89	820	2.72	820	2.72	3,504	11.60
Total	19,311	9.73	5,992	3.02	6,578	3.31	33,186	16.72

Cont. Table 10.3: Number of Agricultural Households Reporting the THIRD Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
	Number	%	Number	%	Number	%	Number	%
Babati	632	0.99	158	0.25	158	0.25	2,369	3.71
Hanang	1,950	4.94	98	0.25	0	0.00	2,730	6.91
Mbulu	2,999	7.16	103	0.25	0	0.00	1,241	2.96
Simanjiro	1,998	8.64	228	0.99	171	0.74	1,256	5.43
Kiteto	820	2.72	0	0.00	0	0.00	1,939	6.42
Total	8,400	4.23	587	0.30	329	0.17	9,535	4.80

Cont. Table 10.3: Number of Agricultural Households Reporting the THIRD Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing		Harvesting	
	Number	%	Number	%	Number	%	Number	%
Babati	3,633	5.69	2,211	3.47	158	0.25	0	0.00
Hanang	3,218	8.15	2,048	5.19	0	0.00	0	0.00
Mbulu	2,586	6.17	931	2.22	414	0.99	517	1.23
Simanjiro	2,797	12.10	1,084	4.69	114	0.49	0	0.00
Kiteto	3,952	13.09	1,118	3.70	75	0.25	0	0.00
Total	16,185	8.15	7,393	3.72	760	0.38	517	0.26

Cont. Table 10.3: Number of Agricultural Households Reporting the THIRD Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Crop Storage		Crop Processing		Marketing Information		Higher Transport Costs	
	Number	%	Number	%	Number	%	Number	%
Babati	1,422	2.23	158	0.25	4,107	6.44	2,211	3.47
Hanang	98	0.25	98	0.25	1,853	4.69	585	1.48
Mbulu	517	1.23	103	0.25	2,689	6.42	310	0.74
Simanjiro	514	2.22	57	0.25	1,027	4.44	685	2.96
Kiteto	298	0.99	0	0.00	596	1.98	969	3.21
Total	2,848	1.43	416	0.21	10,273	5.17	4,761	2.40

Cont. Table 10.3: Number of Agricultural Households Reporting the THIRD Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation	
	Number	%	Number	%	Number	%	Number	%
Babati	790	1.24	158	0.25	3,633	5.69	0	0.00
Hanang	0	0.00	0	0.00	1,755	4.44	98	0.25
Mbulu	621	1.48	103	0.25	414	0.99	0	0.00
Simanjiro	1,370	5.93	57	0.25	913	3.95	57	0.25
Kiteto	1,267	4.20	373	1.23	522	1.73	298	0.99
Total	4,048	2.04	691	0.35	7,237	3.65	453	0.23

Cont. Table 10.3: Number of Agricultural Households Reporting the THIRD Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint					
	Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
	Number	%	Number	%	Number	%
Babati	3,949	6.19	0	0.00	63,816	100.00
Hanang	1,853	4.69	0	0.00	39,494	100.00
Mbulu	1,551	3.70	103	0.25	41,889	100.00
Simanjiro	2,683	11.60	228	0.99	23,117	100.00
Kiteto	596	1.98	1,939	6.42	30,196	100.00
Total	10,632	5.36	2,270	1.14	198,513	100.00

10.4: Number of Agricultural Households Reporting the FOURTH Most important Constraint by District, 2007/08 Agricultural Year

District	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
	Number	%	Number	%	Number	%	Number	%
Babati	1,896	2.97	5,509	1.24	4,423	6.93	3,001	4.70
Hanang	1,853	4.69	5,887	1.48	3,121	7.90	1,463	3.70
Mbulu	414	0.99	1,623	1.23	3,413	8.15	4,654	11.11
Simanjiro	628	2.72	2,606	0.99	970	4.20	400	1.73
Kiteto	522	1.73	6,171	1.23	2,684	8.89	1,566	5.19
Total	5312	2.68	2493.16	1.26	14611.06	7.36	11084	5.58

Cont. Table 10.4: Number of Agricultural Households Reporting the FOURTH Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
	Number	%	Number	%	Number	%	Number	%
Babati	3,475	5.45	2,053	3.22	2,369	3.71	10,899	17.08
Hanang	2,535	6.42	488	1.23	2,243	5.68	4,486	11.36
Mbulu	3,620	8.64	517	1.23	931	2.22	5,275	12.59
Simanjiro	685	2.96	57	0.25	514	2.22	1,941	8.40
Kiteto	2,759	9.14	298	0.99	820	2.72	4,474	14.81
Total	13,074	6.59	3,414	1.72	6,877	3.46	27,074	13.64

Cont. Table 10.4: Number of Agricultural Households Reporting the FOURTH Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
	Number	%	Number	%	Number	%	Number	%
Babati	1,738	2.72	158	0.25	158	0.25	2,527	4.68
Hanang	2,145	5.43	0	0.00	98	0.25	1,950	5.87
Mbulu	3,827	9.14	103	0.25	103	0.25	724	3.85
Simanjiro	1,027	4.44	57	0.25	57	0.25	1,598	3.00
Kiteto	1,939	6.42	0	0.00	0	0.00	1,044	1.67
Total	10,676	5.38	318	0.16	416	0.21	7,844	3.95

Cont. Table 10.4: Number of Agricultural Households Reporting the FOURTH Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing		Harvesting	
	Number	%	Number	%	Number	%	Number	%
Babati	4,897	7.67	3,949	6.19	158	0.25	0	0.00
Hanang	4,388	11.11	3,511	8.89	0	0.00	0	0.00
Mbulu	3,103	7.41	3,310	7.90	621	1.48	414	0.99
Simanjiro	1,598	6.91	1,142	4.94	0	0.00	57	0.25
Kiteto	1,864	6.17	895	2.96	149	0.49	75	0.25
Total	15,850	7.98	12,806	6.45	928	0.47	545	0.27

Cont. Table 10.4: Number of Agricultural Households Reporting the FOURTH Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Crop Storage		Crop Processing		Marketing Information		Higher Transport Costs	
	Number	%	Number	%	Number	%	Number	%
Babati	2,369	3.71	316	0.50	3,317	5.20	2,211	3.47
Hanang	878	2.22	195	0.49	3,706	9.38	585	1.48
Mbulu	1,241	2.96	517	1.23	2,689	6.42	1,241	2.96
Simanjiro	856	3.70	171	0.74	1,370	5.93	1,084	4.69
Kiteto	447	1.48	298	0.99	969	3.21	1,566	5.19
Total	5,792	2.92	1,498	0.75	12,051	6.07	6,688	3.37

Cont. Table 10.4: Number of Agricultural Households Reporting the FOURTH Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation	
	Number	%	Number	%	Number	%	Number	%
Babati	3,475	5.45	632	0.99	3,001	4.70	0	0.00
Hanang	293	0.74	390	0.99	2,243	5.68	98	0.25
Mbulu	827	1.98	207	0.49	827	1.98	0	0.00
Simanjiro	3,710	16.05	171	0.74	1,655	7.16	171	0.74
Kiteto	1,491	4.94	820	2.72	1,566	5.19	447	1.48
Total	9,796	4.93	2,220	1.12	9,293	4.68	716	0.36

Cont. Table 10.4: Number of Agricultural Households Reporting the FOURTH Most important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint					
	Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
	Number	%	Number	%	Number	%
Babati	5,529	8.66	474	0.74	63,816	100.00
Hanang	2,048	5.19	195	0.49	39,494	100.00
Mbulu	2,482	5.93	310	0.74	41,889	100.00
Simanjiro	2,740	11.85	228	0.99	23,117	100.00
Kiteto	1,267	4.20	1,864	6.17	30,196	100.00
Total	14,066	7.09	3,071	1.55	198,513	100.00

10.5: Number of Agricultural Households Reporting the FIFTH important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
	Number	%	Number	%	Number	%	Number	%
Babati	1,896	2.97	948	1.49	3,633	5.69	3,317	5.2
Hanang	1,170	2.96	488	1.23	2,828	7.16	1,365	3.46
Mbulu	1,345	3.21	931	2.22	3,310	7.9	3,827	9.14
Simanjiro	228	0.99	285	1.23	1,084	4.69	114	0.49
Kiteto	1,118	3.7	820	2.72	1,864	6.17	1,342	4.44
Total	5,757	2.9	3,472	1.75	12,719	6.41	9,966	5.02

Cont. Table 10.5: Number of Agricultural Households Reporting the FIFTH important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
	Number	%	Number	%	Number	%	Number	%
Babati	4,581	7.18	1,896	2.97	2,053	3.22	5,213	8.17
Hanang	3,121	7.90	780	1.98	1,365	3.46	3,121	7.90
Mbulu	5,068	12.10	207	0.49	621	1.48	3,827	9.14
Simanjiro	628	2.72	400	1.73	400	1.73	1,427	6.17
Kiteto	2,610	8.64	0	0.00	1,118	3.70	1,789	5.93
Total	16,007	8.06	3,282	1.65	5,557	2.80	15,377	7.75

Cont. Table 10.5: Number of Agricultural Households Reporting the FIFTH important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
	Number	%	Number	%	Number	%	Number	%
Babati	5,213	8.17	158	0.25	0	0.00	2,685	4.21
Hanang	2,828	7.16	195	0.49	293	0.74	1,950	4.94
Mbulu	4,034	9.63	103	0.25	0	0.00	827	1.98
Simanjiro	1,084	4.69	57	0.25	171	0.74	1,027	4.44
Kiteto	1,342	4.44	0	0.00	0	0.00	746	2.47
Total	14,501	7.30	514	0.26	464	0.23	7,236	3.65

Cont. Table 10.5: Number of Agricultural Households Reporting the FIFTH important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing		Harvesting	
	Number	%	Number	%	Number	%	Number	%
Babati	4,107	6.44	2,843	4.94	474	0.74	0	0.00
Hanang	3,803	9.63	2,243	6.58	195	0.49	0	0.00
Mbulu	3,930	9.38	2,069	6.45	310	0.74	207	0.49
Simanjiro	2,397	10.37	913	4.58	0	0.00	228	0.99
Kiteto	2,982	9.88	820	4.54	149	0.49	75	0.25
Total	17,220	8.67	8,888	4.48	1,128	0.57	510	0.26

Cont. Table 10.5: Number of Agricultural Households Reporting the FIFTH important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Crop Storage		Crop Processing		Marketing Information		Higher Transport Costs	
	Number	%	Number	%	Number	%	Number	%
Babati	3,001	4.70	0	0.00	3,317	5.20	1,264	1.98
Hanang	1,463	3.70	683	1.73	3,121	7.90	1,950	4.94
Mbulu	1,241	2.96	517	1.23	2,793	6.67	931	2.22
Simanjiro	342	1.48	342	1.48	2,397	10.37	913	3.95
Kiteto	373	1.23	75	0.25	1,417	4.69	1,267	4.20
Total	6,420	3.23	1,617	0.81	13,044	6.57	6,326	3.19

Cont. Table 10.5: Number of Agricultural Households Reporting the FIFTH important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint							
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation	
	Number	%	Number	%	Number	%	Number	%
Babati	2,369	3.71	1,264	1.98	8,056	12.62	0	0.00
Hanang	0	0.00	683	1.73	2,340	5.93	98	0.25
Mbulu	724	1.73	103	0.25	1,448	3.46	103	0.25
Simanjiro	1,941	8.40	114	0.49	2,055	8.89	171	0.74
Kiteto	1,640	5.43	895	2.96	1,640	5.43	746	2.47
Total	6,674	3.36	3,059	1.54	15,540	7.83	1,118	0.56

Cont. Table 10.5: Number of Agricultural Households Reporting the FIFTH important Constraint by District, 2007/08 Agricultural Year- Manyara Region

District	Constraint					
	Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
	Number	%	Number	%	Number	%
Babati	5,213	8.17	316	0.50	63,816	100.00
Hanang	3,218	8.15	195	0.49	39,494	100.00
Mbulu	2,896	6.91	517	1.23	41,889	100.00
Simanjiro	3,938	17.04	457	1.98	23,117	100.00
Kiteto	1,566	5.19	3,802	12.59	30,196	100.00
Total	16,831	8.48	5,287	2.66	198,513	100.00

CATTLE PRODUCTION

11.1: Total Number of Households Rearing Cattle by District during 2007/08 Agriculture Year - Manyara Region

District	Households rearing cattle		Households not rearing cattle		Total Agriculture households	Total Number of Households Rearing Livestock
	Number	%	Number	%		
Babati	36,805	58	27,011	42	63,816	43,439
Hanang	29,742	75	9,752	25	39,494	32,375
Mbulu	31,857	76	10,033	24	41,889	34,339
Simanjiro	15,582	67	7,534	33	23,117	18,950
Kiteto	6,263	21	23,933	79	30,196	8,798
Total	120,249	61	78,263	39	198,513	137,902

11.2: Number of Cattle by Type and District as of 1st October 2008 - Manyara Region

District	Indigenous			Improved Beef			Improved Dairy			Total		
	Number of households	Number of Cattle	%	Number of households	Number of Cattle	%	Number of households	Number of Cattle	%	Number of households	Number of Cattle	%
Babati	35,699	415,437	99.0	316	790	0.2	1,896	3,317	0.8	37,911	419,544	100
Hanang	29,547	370,269	98.7	98	195	0.1	1,560	4,681	1.2	31,205	375,144	100
Mbulu	31,753	292,605	99.0	207	310	0.1	724	2,793	0.9	32,684	295,708	100
Simanjiro	15,468	358,283	99.8	0	0	0.0	285	685	0.2	15,754	358,968	100
Kiteto	6,114	211,895	99.4	224	820	0.4	75	373	0.2	6,412	213,088	100
Total	118,525	1,648,290	98.4	1,079	4,930	0.3	5,242	21,129	1.3	124,846	1,674,349	100

11.3: Number of Households rearing cattle, Head of Cattle and Average Head per Household by Herd size During the 2007/08 Agricultural Year -Manyara Region

Herd size	Cattle Rearing Households	%	Herd of Cattle	Average Per Household
1 - 5	38,355	32	124,409	3
6 - 10	40,920	34	314,323	8
11 - 15	16,198	13	209,397	13
16 - 20	9,646	8	168,005	17
21 - 30	6,902	6	173,271	25
31 - 40	2,077	2	72,574	35
41 - 50	1,721	1	78,966	46
51 - 60	1,192	1	66,015	55
61 -100	1,545	1	124,099	80
101 -150	605	1	71,471	118
151+	1,088	1	259,922	239
Total	120,249	100	1,662,452	14

11.4: Total Number of Cattle by Cattle Types and Category, 2007/08 Agricultural Year- Manyara Region

Cattle Types	Indigeneous	Improved Beef	Improved Diary	Total Cattle	%
Castrated Bulls (Oxen)	232,777	75	999	233,850	14
Uncastrated Bulls	223,360	224	953	224,537	14
Cows	588,876	540	3,532	592,948	36
Steers	25,109	0	934	26,043	2
Heifers	200,534	0	1,690	202,224	12
Male Calves	173,180	310	1,912	175,402	11
Female Calves	204,653	967	1,828	207,448	12
Total	1,648,488	2,115	11,848	1,662,452	100

11.5: Total Number of indigenous Cattle by Category of cattle and District During the 2007/08 Agricultural Year- Manyara Region

District	Cattle Type															
	Castrated Bulls (Oxen)		Uncastrated Bulls		Cows		Steers		Heifers		Male Calves		Female Calves		Total	
	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%
Babati	75,031	17	66,817	17	140,111	24	3,791	1	33,488	8	45,177	15	51,021	17	415,437	100
Hanang	58,607	16	57,047	18	125,406	23	4,388	2	45,540	9	34,228	15	45,052	18	370,269	100
Mbulu	43,648	15	47,268	18	96,915	25	5,378	1	37,442	9	29,788	16	32,167	16	292,605	100
Simanjiro	41,325	14	29,338	15	143,610	23	7,078	3	44,921	10	42,067	16	49,944	17	358,283	100
Kiteto	14,166	12	22,889	17	82,834	21	4,474	4	39,143	12	21,920	16	26,468	18	211,895	100
Total	232,777	14	223,132	14	588,160	36	25,855	2	200,534	12	173,180	11	204,653	12	1,648,290	100

11.6: Total Number of Improved Beef Cattle by Category of cattle and Region During the 2007/08 Agricultural Year- Manyara Region

District	Cattle Type															
	Castrated Bulls (Oxen)		Uncastrated Bulls		Cows		Steers		Heifers		Male Calves		Female Calves		Total	
	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%
Babati	0	0	0	0	316	33	0	0	0	0	0	0	474	67	790	100
Hanang	0	0	0	0	0	0	0	0	0	0	0	0	195	100	195	100
Mbulu	0	0	0	0	0	0	0	0	0	0	310	100	0	0	310	100
Simanjiro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kiteto	75	20	224	20	224	20	0	0	0	0	0	0	298	40	820	100
Total	75	2	1,722	35	1,856	38	0	0	0	0	310	6	967	20	4,930	100

11.7: Total Number of Improved Dairy Cattle by Category of cattle and District During the 2007/08 Agricultural Year- Manyara Region

District	Cattle Type															
	Castrated Bulls (Oxen)		Uncastrated Bulls		Cows		Steers		Heifers		Male Calves		Female Calves		Total	
	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%
Babati	316	5	316	11	790	26	316	11	790	21	316	11	474	16	3,317	100
Hanang	683	10	195	7	1,755	33	390	3	488	13	390	13	780	20	4,681	100
Mbulu	0	0	310	7	724	27	0	0	207	13	1,034	33	517	20	2,793	100
Simanjiro	0	0	57	13	114	13	228	25	57	13	171	25	57	13	685	100
Kiteto	0	0	75	33	149	33	0	0	149	33	0	0	0	0	373	100
Total	2,565	12	2,926	14	3,532	17	1,882	9	2,033	10	3,132	15	5,059	24	21,129	100

11.8: Total Number Households rearing Cattle and Method of Cattle Identification by District during, 2007/08 Agricultural Year- Manyara Region

District	Branding		Cattle Clan		Ear notching		Colour		Earrings		Others		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	26,695	73	1,264	3	1,106	3	4,581	12	316	1	2,843	8	36,805	100
Hanang	26,914	90	1,268	4	293	1	780	3	390	1	98	0	29,742	100
Mbulu	21,927	69	1,241	4	1,965	6	6,620	21	0	0	103	0	31,857	100
Simanjiro	11,929	76	342	2	2,283	15	685	4	342	2	57	0	15,640	100
Kiteto	3,579	57	298	5	1,267	20	1,044	17	0	0	75	1	6,263	100
Total	90,988	76	4,413	4	6,914	6	13,709	11	1,048	1	3,176	3	120,249	100

CATTLE MILK

11.9: Average Cattle Milk price (Tshs/litre) per season by category of cow and District, During the 2007/08 Agricultural Year- Manyara Region

District	Number of milked cows		Average milk production per cow per day (lts)		Average number of days cows milked		Average price per litre per season (Tshs)	
	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season
Babati	81,508	64,922	2	2	160	138	457	430
Hanang	68,261	57,827	2	1	137	113	403	433
Mbulu	73,229	35,373	2	1	141	101	446	507
Simanjiro	119,922	56,280	2	1	132	98	519	587
Kiteto	44,437	35,639	2	1	172	157	336	401
Total	387,357	250,041	2	1	146	120	444	465

GOAT PRODUCTION

11.10: Number of Agriculture Households Rearing Goats by District during the 2007/08 Agricultural Year-Manyara Region

District	Raising goats		Not raising goats		Total	Total livestock keeping households
	No of households	%	No of households	%		
Babati	34,120	53	29,697	47	63,816	43,439
Hanang	24,086	61	15,408	39	39,494	32,375
Mbulu	24,616	59	17,273	41	41,889	34,339
Simanjiro	17,637	76	5,480	24	23,117	18,950
Kiteto	8,947	30	21,249	70	30,196	8,798
Total	109,407	55	89,106	45	198,513	193,288

11.11: Number of Goats by Type and District as of 1st October 2008- Manyara Region

District	Indigenous			Improved for Meat			Improved Dairy			Total	
	Number of households	Number of Goats	%	Number of households	Number of Goats	%	Number of households	Number of Goats	%	Number of households	Number of Goats
Babati	33,804	335,035	959.7	0	0	0	1,106	22,588	65	34,909	915,356
Hanang	23,989	255,005	1,046.0	98	195	1	293	1,463	6	24,379	1,823,303
Mbulu	24,616	226,927	910.4	0	0	0	310	5,275	21	24,927	653,511
Simanjiro	17,637	471,527	2,573.5	57	57	0	628	9,247	50	18,322	718,625
Kiteto	8,574	147,998	1,600.8	75	75	1	596	4,026	44	9,245	377,572
Total	108,489	1,436,057	96.9	304	2,977	0.2	2,990	42,696	2.9	111,783	1,481,729

11.12: Number of Households Rearing Goats, Head of Goats and Average Head per Household by Herd Size as of 1st October 2008- Manyara Region

Herd Size	Goat rearing households		Herd of Goats		Average Goats per household
	Number	%	Number	%	
1-4	267,166	77	539,036	36.4	2
5-9	45,024	13	280,048	18.9	6
10-14	16,044	5	176,130	11.9	11
15-19	5,681	2	92,489	6.3	16
20-24	4,052	1	84,008	5.7	21
25-29	1,110	0	28,766	1.9	26
30-39	2,433	1	77,118	5.2	32
40+	3,275	1	201,674	13.6	62
Total	344,785	100	1,479,268	100.0	4

11.13: Total Number of Goats by Category and Type of Goat as of 1st October 2008 - Manyara Region

Category	Indigenous		Improved Meat		Improved Dairy		Total	
	Number	%	Number	%	Number	%	Number	%
Billy Goats	196,204	94.9	132	0.1	10,659	5.2	206,845	14.0
She Goats	162,790	97.5	0	0.0	4,104	2.5	166,893	11.3
Castrated Goat	704,233	97.6	195	0.0	17,322	2.4	721,749	48.8
Male Kid	191,062	95.3	0	0.0	9,396	4.7	200,458	13.6
She Kid	182,203	99.4	0	0.0	1,119	0.6	183,323	12.4
Total	1,436,491	97.1	327	0.0	42,599	2.9	1,479,268	100

11.14 : Total Number of Indigenous Goat by Category and District as of 1st October 2008 - Manyara Region

District	Goat Type											
	Billy Goat		Castrated Goat		She Goat		Male Kid		She Kid		Total	
	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%
Babati	53,391	16	39,490	12	158,908	47	41,386	12	41,860	12	335,035	100
Hanang	41,054	16	26,914	11	125,991	49	30,230	12	30,815	12	255,005	100
Mbulu	33,822	15	17,583	8	116,256	51	31,443	14	27,823	12	226,927	100
Simanjiro	48,403	10	57,478	12	238,361	51	65,412	14	61,873	13	471,527	100
Kiteto	19,534	13	21,324	14	64,717	44	22,591	15	19,833	13	147,998	100
Total	196,055	14	162,790	11	703,947	49	191,062	13	182,203	13	1,436,057	100

11.15: Number of Improved Goats for Meat by Category and District as of 1st October 2008

District	Goat Type											
	Billy Goat		Castrated Goat		She Goat		Male Kid		She Kid		Total	
	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%
Babati	0	0	0	0	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	195	100	0	0	0	0	195	100
Mbulu	0	0	0	0	0	0	0	0	0	0	0	0
Simanjiro	57	100	0	0	0	0	0	0	0	0	57	100
Kiteto	75	100	0	0	0	0	0	0	0	0	75	100
Total	952	55	0	0	2,025	45	0	0	0	0	2,977	100

11.16: Number of Improved Dairy Goats by Category and District as of 1st October 2008 - Manyara Region

District	Goat Type											
	Billy Goat		Castrated Goat		She Goat		Male Kid		She Kid		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	9,162	41	3,633	16	7,740	34	1,580	7	474	2	22,588	100
Hanang	975	67	293	20	98	7	98	7	0	0	1,463	100
Mbulu	0	0	103	2	5,172	98	0	0	0	0	5,275	100
Simanjiro	0	0	0	0	1,256	14	7,420	80	571	6	9,247	100
Kiteto	522	13	75	2	3,057	76	298	7	75	2	4,026	100
Total	10,659	25.0	4,104	9.6	17,418	40.8	9,396	22.0	1,119	2.6	42,696	100

11.17: Milk Production from Goat By Season and District, During the 2007/08 Agricultural Year - Manyara Region

District	Number of Milked goat		Average milk production per goat per day (lts)		Average number of days for goats on milked		Average price per litre per season (Tshs)	
			Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season
	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season
Babati	3,234	1,679	2	1	62	36	267	332
Hanang	204,384	100,363	1	1	80	67	415	625
Mbulu	19,151	15,768	1	1	87	73	563	691
Simanjiro	19,881	15,318	1	1	117	84	492	473
Kiteto	4,587	4,866	2	2	79	83	524	523
Total	87,385	30,638	1	1	77	82	563	540

SHEEP PRODUCTION

11.18: Number of Households Rearing Sheep by District during the 2007/08 Agriculture Year - Manyara Region

District	Number of households raising or managing sheep	%	Number of households not raising or managing sheep	%	Number of agriculture households	Total livestock keeping households
Babati	18,797	29	45,019	71	63,816	43,439
Hanang	17,260	44	22,234	56	39,494	32,375
Mbulu	19,962	48	21,927	52	41,889	34,339
Simanjiro	13,014	56	10,103	44	23,117	18,950
Kiteto	3,728	12	26,468	88	30,196	8,798
Total	72,762	37	125,751	63	198,513	137,902

11.19: Number of Sheep by Type and District as of 1st October 2008 - Manyara Region

District	Total				
	Number of Indigenous	%	Number of Improved for Mutton	%	Total Sheep
Babati	116,417	100.0	0	0.0	116,417
Hanang	133,695	100.0	0	0.0	133,695
Mbulu	120,910	100.0	0	0.0	120,910
Simanjiro	217,926	100.0	0	0.0	217,926
Kiteto	51,371	100.0	0	0.0	51,371
Total	640,091	88.9	0	0.0	719,731

11.20: Total Number of Indigenous Sheep by Category of Sheep and District as of 1st October 2007/08 Agriculture year- Manyara Region

District	Number of Indigenous					Total
	Ram	Castrated Sheep	She Sheep	Male Lamb	She Lamb	
Babati	20,851	9,004	60,499	12,953	13,111	116,417
Hanang	21,063	9,654	51,001	41,054	10,922	133,695
Mbulu	18,411	12,929	55,853	13,032	20,686	120,910
Simanjiro	24,658	28,711	106,737	29,224	28,596	217,926
Kiteto	8,574	7,083	21,771	6,859	7,083	51,371
Total	93,329	67,380	295,861	103,123	80,398	640,091

11.21: Number of Improved Sheep for Mutton by Category and District as of 1st October 2008 - Manyara Region

District	Number of Improved					Total
	Ram	Castrated Sheep	She Sheep	Male Lamb	She Lamb	
Babati	0	0	0	0	0	0
Hanang	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0
Total	0	0	0	0	0	0

11.22: Number of Households rearing Sheep, Head of Sheep and Average Head per Household by Herd size During the 2007/08 Agricultural Year, Manyara Region

Herd size	Sheep Rearing Households	%	Herd of sheep	Average Per Household
1 - 4	35,730	49	89,256	2
5 - 9	20,558	28	132,043	6
10 - 14	7,509	10	84,599	11
15 - 19	3,021	4	50,033	17
20 - 24	2,026	3	43,751	22
25 - 29	778	1	21,002	27
30 - 34	632	1	19,664	31
35 - 39	114	0	3,996	35
40+	2,394	3	195,975	82
Total	72,762	100	640,319	9

11.23: Total Number of Sheep by Breed Type During the 2007/08 Agriculture Year - Manyara Region

Category	Number of Indigenous	%	Number of Improved	%	Total	%
Rams	93,557	100	0	0	93,557	15
She Sheep	295,861	100	0	0	295,861	46
Castrated Sheep	67,380	100	0	0	67,380	11
Male Lamb	103,123	100	0	0	103,123	16
Female Lamb	80,398	100	0	0	80,398	13
Total	640,319	100	0	0	640,319	100

PIG PRODUCTION

11.24: Number of Households Raising Pigs by District during 2007/08 Agriculture Year- Manyara Region

District	During the 2007/2008 Agriculture Year					
	Rearing Pigs		Not rearing pigs		Total	
	No of households	%	No of households	%	No of households	%
Babati	8,372	13	55,444	87	63,816	100.0
Hanang	5,948	15	33,546	85	39,494	100.0
Mbulu	23,168	55	18,721	45	41,889	100.0
Simanjiro	685	3	22,432	97	23,117	100.0
Kiteto	820	3	29,376	97	30,196	100.0
Total	38,994	20	159,519	80	198,513	100.0

11.25 : Number of Households Rearing Pigs, Head of Pigs and Average Head per Household by Herd Size as of 1st October 2008 - Manyara Region

Flock Size	Pig rearing households		Herd of pigs		Average per household
	Number	%	Number	%	
1 - 4	34,486	88	60,782	63.0	2
5 - 9	3,481	9	21,201	22.0	6
10 - 14	896	2	9,633	10.0	11
20 - 24	57	0	1,142	1.2	20
40+	75	0	3,728	3.9	50
Total	38,994	100	96,485	100.0	2

11.26: Total Number of Pigs by Type of Pigs and District as of 1st October 2008

District	Pig Type					Total
	Boar	Castrated Male	Sow / Gilt	Male Piglet	She Piglet	
Babati	3,791	2,527	8,214	3,001	2,053	19,587
Hanang	3,998	1,073	7,704	878	1,658	15,310
Mbulu	9,309	7,137	26,582	3,310	4,861	51,198
Simanjiro	856	285	2,340	400	171	4,053
Kiteto	895	671	1,789	1,342	1,640	6,337
Total	18,849	11,693	46,629	8,930	10,384	96,485

11.27 : Number of Pigs per Household by District as of 1st October 2008

District	Number of households	Number of pigs	Average per household
Babati	8,372	19,587	2
Hanang	5,948	15,310	3
Mbulu	23,168	51,198	2
Simanjiro	685	4,053	6
Kiteto	820	6,337	8
Total	38,994	96,485	2

CHICKEN AND OTHER LIVESTOCK

11.28 : Number of CHICKEN by Type and Region as of 1st October 2008 - Manyara Region

District	Indigineous chicken			Layers			Broilers			Total	
	Number of Households	Number of Indigineous Chicken	%	Number of Households	Number of Layers	%	Number of Households	Number of Broilers	%	Number of Households	Number of Chicken
Babati	46,125	376,420	91	474	3,001	1	316	948	0	46,914	380,369
Hanang	30,620	241,157	78	585	3,316	1	1,268	6,339	2	32,473	250,811
Mbulu	33,512	240,166	89	414	1,448	1	207	1,034	0	34,132	242,648
Simanjiro	9,875	112,673	78	57	57	0	0	0	0	9,932	112,730
Kiteto	9,245	87,755	87	224	1,864	2	0	0	0	9,469	89,619
Total	129,376	1,058,172	98.3	1,753	9,686	0.9	1,790	8,321	0.8	132,920	1,076,179

11.29: Number of Households Keeping Chickens per Household by Flock Size as of 1st October 2008 – Manyara Region

Heard Size	Indigineous chicken			Layers			Broilers				
	Number of Households	Number of Indigineous Chicken	%	Number of Animal Per Household	Number of Households	Number of Layers	Number of Animal Per Household	Number of Households	Number of Broilers	%	Number of Animal Per Household
1-49	128,603	1,002,301	85	8	1,753	9,686	6	1,790	8,321	1	5
50-99	558	28,488	100	51	0	0	0	0	0	0	0
100-299	215	27,383	100	127	0	0	0	0	0	0	0
300-499	0	0	0.0	0	0	0	0	0	0	0.0	0
500-699	0	.	0.0	0	0	0	0	0	0	0.0	0
700+	0	.	0.0	0	0	0	0	0	0	0.0	0
Total	129,376	1,058,172	85	8	1,753	9,686	6	1,790	8,321	1	5

11.30: Number of Other Livestock by Type of livestock and District as of 1st October 2008 Manyara Region

District	Ducks	Guine pigs	Turkeys	Rabbits	Donkeys	Horses	Dogs
Babati	9,952	0	0	316	7,898	0	16,112
Hanang	5,948	0	2,145	98	23,209	0	25,842
Mbulu	1,241	0	4,861	414	7,964	0	13,446
Simanjiro	856	57	0	0	17,980	0	12,614
Kiteto	2,982	75	0	0	4,175	0	3,653
Total	20,980	132	7,007	827	60,641	1,325	73,674

11.31 : Total Number of Other Livestock by Type as of 1st October 2008 - Manyara Region

Type	Chicken		Others	
	Number	%	Type	Number
Indigenous Chicken	1,058,172	98.3	Ducks	20,980
Layer	9,686	0.9	Guine pigs	132
Broiler	8,321	0.8	Turkeys	7,007
			Rabbits	827
			Donkeys	61,226
			Horses	0
			Dogs	71,667
TOTAL	1,076,179	100		161,839

PESTS AND PARASITES

11.32: Number of Livestock Rearing households deworming Livestock by region during 2007/08 Agriculture Year- Manyara Region

District	Deworming Livestock		Not Deworm Livestock		Total	
	Number	%	Number	%	Number of Livestock Rearing households	%
Babati	38,226	68	17,850	32	56,076	100
Hanang	25,062	68	11,799	32	36,861	100
Mbulu	27,616	70	11,584	30	39,200	100
Simanjiro	15,411	73	5,594	27	21,005	100
Kiteto	7,530	48	8,052	52	15,583	100
Total	113,846	67	54,879	33	168,725	100

11.33: Number of Livestock Rearing households that dewormed Livestock by type of livestock and District, 2007/08 Agricultural Year- Manyara Region

District	Cattles				Goats			
	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total
Babati	30,644	2,053	5,845	38,542	25,748	5,529	6,950	38,226
Hanang	22,916	488	1,658	25,062	16,870	3,803	4,388	25,062
Mbulu	23,686	1,241	2,689	27,616	17,273	4,654	5,689	27,616
Simanjiro	10,160	2,683	2,626	15,468	13,984	514	913	15,411
Kiteto	3,281	1,044	3,281	7,605	5,443	895	1,267	7,605
Total	90,431	7,509	16,098	114,038	79,160	15,395	19,110	113,665

11.34: Number of Livestock Rearing households that dewormed Livestock by type of livestock and District, 2007/08 Agricultural Year- Manyara Region

District	Sheep				Pigs			
	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total
Babati	5,371	4,739	28,117	38,226	8,372	21,167	8,688	38,226
Hanang	3,121	4,291	17,650	25,062	7,411	13,945	3,706	25,062
Mbulu	12,101	5,585	9,929	27,616	7,033	17,583	2,999	27,616
Simanjiro	628	1,370	13,413	15,411	2,454	5,537	7,420	15,411
Kiteto	671	522	6,412	7,605	1,342	2,908	3,430	7,680
Total	21,891	16,507	75,267	113,665	26,613	60,981	26,145	113,739

11.35: Number of Livestock Rearing Households Normally Encountering Tick Problems by Region during 2007/08 Agriculture Year

District	Tick Problem		No Tick Problem		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Babati	35,541	63	8,056	14	12,479	22	56,076	100
Hanang	27,597	75	4,193	11	4,778	13	36,569	100
Mbulu	26,478	68	9,309	24	3,413	9	39,200	100
Simanjiro	17,181	82	1,941	9	1,884	9	21,005	100
Kiteto	7,829	53	2,311	16	4,623	31	14,763	100
Total	114,626	70	25,419	15	24,452	15	164,497	100

11.36: Number of Livestock Rearing Households by Method of Tick Control and District during 2007/08 Agriculture Year-Manyara Region

District	Dipping		Spraying		Smearing		None		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	2,211	4	35,225	63	1,422	3	17,060	30	158	0	56,076	100
Hanang	1,658	5	26,524	73	1,268	3	6,826	19	293	1	36,569	100
Mbulu	4,654	12	21,307	54	2,999	8	10,240	26	0	0	39,200	100
Simanjiro	5,480	26	11,530	55	685	3	2,968	14	342	2	21,005	100
Kiteto	3,057	21	5,070	34	895	6	5,592	38	149	1	14,763	100
Total	16,985	10	99,656	61	6,077	4	40,837	25	942	1	164,497	100

11.37: Number of Livestock Rearing Households normally Encountering Tsetse Flies Problems by Region during 2007/08 Agriculture Year-Manyara Region

District	Households Encountering Tsetse problems		Households Without Tsetse Problems		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Babati	11,847	21	27,959	50	16,270	29	56,076	100
Hanang	7,801	21	21,551	59	7,216	20	36,569	100
Mbulu	8,068	21	26,582	68	4,551	12	39,200	100
Simanjiro	15,183	72	3,425	16	2,397	11	21,005	100
Kiteto	2,460	17	7,232	49	5,070	34	14,763	100
Total	45,285	28	86,674	53	32,538	20	164,497	100

11.38: Number of Livestock Rearing Households by Method of Tsetse Flies Control and Region during 2007/08 Agriculture Year

District	Dipping		Spraying		Trappig		None		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Babati	1,264	2	9,636	17	2,685	5	42,018	75	474	1	56,076	100
Hanang	780	2	5,266	14	488	1	27,500	75	2,535	7	36,569	100
Mbulu	1,551	4	10,446	27	827	2	26,065	66	310	1	39,200	100
Simanjiro	2,683	13	8,448	40	799	4	8,562	41	514	2	21,005	100
Kiteto	522	4	1,267	9	820	6	11,855	80	298	2	14,763	100
Total	6725	4	35063	21	4353	3	114224	69	4132	3	164497	100

11.39: Number of Livestock Rearing Households normally Encountering Newcastle Disease Problems by Region during 2007/08 Agriculture Year

District	Households Encountering Newcastle Disease problems		Households NOT Encountering Newcastle Disease problems		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Babati	34,751	62	12,005	21	9,320	17	56,076	100
Hanang	21,844	60	11,117	30	3,608	10	36,569	100
Mbulu	17,066	44	16,963	43	5,172	13	39,200	100
Simanjiro	7,877	38	3,938	19	9,190	44	21,005	100
Kiteto	8,723	59	2,013	14	4,026	27	14,763	100
Total	90,032	55	45,933	28	28,532	17	164,497	100

11.40: Number of Livestock Rearing Households by Method of Newcastle Disease Control and District during 2007/08 Agriculture Year- Manyara Region

District	Vaccination		Local Herbs		None		Total	
	Number	%	Number	%	Number	%	Number	%
Babati	10,425	19	15,638	28	30,013	54	56,076	100
Hanang	6,144	17	16,773	46	13,652	37	36,569	100
Mbulu	6,413	16	10,343	26	22,444	57	39,200	100
Simanjiro	3,653	17	4,167	20	13,185	63	21,005	100
Kiteto	1,789	12	4,623	31	8,351	57	14,763	100
Manyara	28,349	17	51,383	31	84,765	52	164,497	100

11.41: Number of Livestock Rearing Households normally Encountering Fowl Typhoid Disease Problems by District during 2007/08 Agriculture Year-Manyara Region

District	Households Encountering Fowl Typhoid Disease problems		Households NOT Encountering Fowl Typhoid Disease problems		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Babati	16,270	29	27,801	50	12,005	21	56,076	100
Hanang	13,457	37	19,503	53	3,608	10	36,569	100
Mbulu	9,722	25	23,892	61	5,585	14	39,200	100
Simanjiro	5,537	26	5,708	27	9,760	46	21,005	100
Kiteto	4,399	30	6,039	41	4,324	29	14,763	100
Total	49,213	30	82,887	50	32,397	20	164,497	100

11.42: Number of Livestock Rearing Households by Method of Newcastle Disease Control and District during 2007/08 Agriculture Year- Manyara Region

District	Vaccination		Local Herbs		None		Total	
	Number	%	Number	%	Number	%	Number	%
Babati	2,685	5	12,479	22	41,070	73	56,234	100
Hanang	683	2	13,555	37	22,331	61	36,569	100
Mbulu	2,379	6	7,240	18	29,581	75	39,200	100
Simanjiro	1,655	8	4,623	22	14,726	70	21,005	100
Kiteto	596	4	3,281	22	10,886	74	14,763	100
Total	7,924	5	41,074	25	115,499	70	164,497	100

11.43: Number of Livestock Rearing Households normally Encountering Foot and Mouth Disease Problems by District during 2007/08 Agriculture Year- Manyara Region

District	Households Encountering Foot and Mouth Disease		Households NOT Encountering Foot and Mouth Disease		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Babati	2,843	5	35,383	63	17,850	32	56,076	100
Hanang	2,048	6	28,377	78	6,144	17	36,569	100
Mbulu	4,448	11	28,237	72	6,516	17	39,200	100
Simanjiro	4,795	23	11,416	54	4,795	23	21,005	100
Kiteto	373	2	7,307	49	7,307	49	14,986	100
Total	14,506	9	110,553	67	39,438	24	164,497	100

11.44: Number of Livestock Rearing Households normally Encountering Lympyskin Disease Problems by District during 2007/08 Agriculture Year- Manyara Region

District	Households Encountering Lympyskin Disease		Households NOT Encountering Lympyskin Disease		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Babati	3,159	6	35,383	63	17,534	31	56,076	100
Hanang	7,996	22	22,916	63	5,656	15	36,569	100
Mbulu	3,620	9	29,478	75	6,102	16	39,200	100
Simanjiro	6,735	32	9,818	47	4,452	21	21,005	100
Kiteto	746	5	6,934	47	7,232	49	14,912	100
Total	22,256	14	104,362	63	37,878	23	164,497	100

LIVESTOCK EXTENSION

11.45 : Number of households receiving extension advice by District during the 2007/08 agriculture year- Manyara Region

Region	Receiving Livestock services		Not Receiving Livestock Extension services		Total
	Number	%	Number	%	
Babati	45,335	104	-1,896	-4	43,439
Hanang	24,477	76	7,899	24	32,375
Mbulu	30,202	88	4,137	12	34,339
Simanjiro	14,726	78	4,224	22	18,950
Kiteto	9,991	114	-1,193	-14	8,798
Total	124,730	75	40,585	25	165,315

11.46: Number of Households receiving Livestock advice (overall) By Source of Extension and District during the 2007/08 agriculture year- Manyara Region

District	Source of Livestock Extension												Number of Household receiving Extension
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Babati	43,123	56.2	9,478	12.3	2,527	3.3	3,633	4.7	7,740	10.1	10,267	13.4	76,769
Hanang	23,891	69.2	3,998	11.6	878	2.5	98	0.3	1,365	4.0	4,291	12.4	34,521
Mbulu	29,478	86.9	517	1.5	207	0.6	517	1.5	517	1.5	2,689	7.9	33,925
Simanjiro	13,813	65.2	4,167	19.7	856	4.0	457	2.2	628	3.0	1,256	5.9	21,176
Kiteto	9,469	79.9	1,417	11.9	75	0.6	75	0.6	224	1.9	596	5.0	11,855
Total	119,774	96.0	19,576	15.7	4,543	3.6	4,779	3.8	10,474	8.4	19,100	15.3	124,730

11.47: Number of Agriculture Households Receiving Advice on Feeds and Proper Feeding by Source and District During 2007/08 Agriculture Year- Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	22,114	80.5	2,053	7.5	0	0.0	790	2.9	1,580	5.7	948	3.4	0	0.0	27,485
Hanang	9,654	90.0	683	6.4	0	0.0	0	0.0	98	0.9	293	2.7	0	0.0	10,727
Mbulu	10,446	97.1	103	1.0	0	0.0	0	0.0	0	0.0	207	1.9	0	0.0	10,757
Simanjiro	6,621	93.5	400	5.6	0	0.0	0	0.0	0	0.0	57	0.8	0	0.0	7,078
Kiteto	5,145	94.5	224	4.1	0	0.0	0	0.0	0	0.0	75	1.4	0	0.0	5,443
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

11.48: Number of households receiving extension advice on Proper Livestock Housing by District during the 2007/08 agriculture year-Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	25,906	78.1	2,685	8.1	0	0.0	474	1.4	1,738	5.2	2,369	7.1	0	0.0	33,172
Hanang	9,654	81.1	1,853	15.6	0	0.0	0	0.0	0	0.0	293	2.5	98	0.8	11,897
Mbulu	15,308	95.5	0	0.0	0	0.0	0	0.0	310	1.9	414	2.6	0	0.0	16,032
Simanjiro	6,279	84.6	856	11.5	57	0.8	0	0.0	57	0.8	171	2.3	0	0.0	7,420
Kiteto	5,890	92.9	373	5.9	0	0.0	0	0.0	0	0.0	75	1.2	0	0.0	6,337
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

11.49: Number of households receiving extension advice on Proper Milking and Milk Hygiene by District during the 2007/08 agriculture year- Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	18,639	71	2,211	8	316	1	790	3	4,401	17	1,580	6	0	0	26,379
Hanang	8,679	79	1,463	13	98	1	0	0	1,333	12	683	6	0	0	10,922
Mbulu	9,929	97	207	2	0	0	0	0	6,912	68	103	1	0	0	10,240
Simanjiro	5,594	85	799	12	0	0	0	0	510	8	114	2	0	0	6,564
Kiteto	4,101	89	373	8	0	0	0	0	2,144	46	149	3	0	0	4,623
Total	53,981	88	3,463	6	0	0	790	1	1,677	3	1,579	3	0	0	61,489

11.50: Number of households receiving extension advice on Livestock fattening by District during the 2007/08 agriculture year-Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	16,586	65.2	1,580	6.2	316	1.2	1,738	6.8	2,053	8.1	3,159	12.4	0	0.0	25,432
Hanang	9,459	80.8	1,073	9.2	0	0.0	0	0.0	98	0.8	1,073	9.2	0	0.0	11,702
Mbulu	12,101	92.1	103	0.8	0	0.0	207	1.6	0	0.0	724	5.5	0	0.0	13,136
Simanjiro	5,194	85.8	514	8.5	114	1.9	57	0.9	57	0.9	114	1.9	0	0.0	6,050
Kiteto	3,504	92.2	298	7.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3,802
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

11.51: Number of households receiving extension advice on Disease control (dipping/spraying) by District during the 2007/08 agriculture year- Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	35,383	139.1	1,896	7.5	316	1.2	1,738	6.8	2,053	8.1	3,159	12.4	0	0.0	25,432
Hanang	18,431	157.5	585	5.0	0	0.0	0	0.0	98	0.8	1,073	9.2	0	0.0	11,702
Mbulu	26,065	198.4	0	0.0	0	0.0	207	1.6	0	0.0	724	5.5	0	0.0	13,136
Simanjiro	9,646	159.4	628	10.4	114	1.9	57	0.9	57	0.9	114	1.9	0	0.0	6,050
Kiteto	7,903	207.8	149	3.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3,802
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

11.52: Number of households receiving extension advice on Herd/Flock size and selection by District during the 2007/08 agriculture year- Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	24,958	81.0	2,211	7.2	316	1.0	0	0.0	1,896	6.2	1,264	4.1	158	0.5	30,802
Hanang	12,482	97.7	195	1.5	0	0.0	0	0.0	0	0.0	98	0.8	0	0.0	12,775
Mbulu	16,239	95.7	103	0.6	0	0.0	207	1.2	0	0.0	310	1.8	103	0.6	16,963
Simanjiro	8,562	86.2	856	8.6	114	1.1	0	0.0	57	0.6	342	3.4	0	0.0	9,932
Kiteto	5,368	96.0	224	4.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5,592
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

11.53: Number of households receiving extension advice on Pasture Establishment by District during the 2007/08 agriculture year- Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	15,480	69.0	1,738	7.7	474	2.1	632	2.8	3,001	13.4	948	4.2	158	0.7	22,430
Hanang	7,411	95.0	293	3.8	0	0.0	0	0.0	98	1.3	0	0.0	0	0.0	7,801
Mbulu	10,033	94.2	103	1.0	0	0.0	103	1.0	0	0.0	414	3.9	0	0.0	10,653
Simanjiro	5,822	85.7	799	11.8	0	0.0	0	0.0	57	0.8	114	1.7	0	0.0	6,792
Kiteto	3,802	98.1	75	1.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3,877
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

11.54: Number of households receiving extension advice on Group formation and strengthening by District during the 2007/08 agriculture year- Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	19,745	69.8	4,107	14.5	948	3.4	0	0.0	1,106	3.9	1,896	6.7	474	1.7	28,275
Hanang	11,702	80.5	488	3.4	780	5.4	0	0.0	390	2.7	1,170	8.1	0	0.0	14,530
Mbulu	7,964	97.5	0	0.0	207	2.5	0	0.0	0	0.0	0	0.0	0	0.0	8,171
Simanjiro	6,222	76.8	970	12.0	114	1.4	342	4.2	0	0.0	457	5.6	0	0.0	8,105
Kiteto	4,548	93.8	224	4.6	75	1.5	0	0.0	0	0.0	0	0.0	0	0.0	4,846
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

11.55: Number of households receiving extension advice on Calf Rearing by District during the 2007/08 agriculture year- Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	15,322	62.6	3,001	12.3	632	2.6	474	1.9	2,527	10.3	2,527	10.3	0	0.0	24,484
Hanang	10,532	87.8	683	5.7	0	0.0	98	0.8	98	0.8	585	4.9	0	0.0	11,994
Mbulu	10,860	96.3	0	0.0	0	0.0	103	0.9	103	0.9	207	1.8	0	0.0	11,274
Simanjiro	5,822	76.7	1,027	13.5	457	6.0	0	0.0	0	0.0	285	3.8	0	0.0	7,591
Kiteto	4,324	95.1	149	3.3	0	0.0	0	0.0	0	0.0	75	1.6	0	0.0	4,548
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

11.56: Number of households receiving extension advice on Use of improved Bulls by District during the 2007/08 agriculture year- Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	11,215	57.7	1,580	8.1	790	4.1	158	0.8	4,107	21.1	1,422	7.3	158	0.8	19,429
Hanang	10,532	94.7	390	3.5	0	0.0	0	0.0	98	0.9	98	0.9	0	0.0	11,117
Mbulu	6,102	95.2	0	0.0	0	0.0	0	0.0	207	3.2	103	1.6	0	0.0	6,413
Simanjiro	5,651	84.6	742	11.1	57	0.9	0	0.0	57	0.9	171	2.6	0	0.0	6,678
Kiteto	3,952	98.1	0	0.0	0	0.0	0	0.0	0	0.0	75	1.9	0	0.0	4,026
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

11.57: Number of households receiving extension advice on Livestock Feeds processing by District during the 2007/08 agriculture year - Manyara Region

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Babati	11,531	56.2	2,211	10.8	474	2.3	474	2.3	3,475	16.9	158	0.8	158	0.8	20,535
Hanang	7,996	83.7	488	5.1	0	0.0	0	0.0	98	1.0	0	0.0	0	0.0	9,557
Mbulu	7,033	94.4	0	0.0	0	0.0	0	0.0	103	1.4	0	0.0	0	0.0	7,447
Simanjiro	3,710	85.5	457	10.5	0	0.0	0	0.0	57	1.3	0	0.0	0	0.0	4,338
Kiteto	4,175	90.3	298	6.5	0	0.0	75	1.6	0	0.0	0	0.0	0	0.0	4,623
Total	53,981	87.8	3,463	5.6	0	0.0	790	1.3	1,677	2.7	1,579	2.6	0	0.0	61,489

FISH FARMING

11.58: Number of Agriculture Households Practising Fish Farming by District during the 2007/08 Agriculture Year- Manyara Region					
District	Was Fish farming carried out by this household during 2007/08				
	Yes	%	No	%	Total
Babati	0	0.0	63,816	100.0	63,816
Hanang	0	0.0	39,494	100.0	39,494
Mbulu	0	0.0	41,889	100.0	41,889
Simanjiro	0	0.0	23,117	100.0	23,117
Kiteto	0	0.0	30,196	100.0	30,196
Total	0	0.0	198,513	100.0	198,513

11.59: Number of Agriculture Households by System of Fish Farming and District during the 2007/08 Agriculture Year- Manyara Region

District	system of fish farming			
	Natural Pond	Dug out Pond	Water Reservoir	Other
Babati	0	0	0	0
Hanang	0	0	0	0
Mbulu	0	0	0	0
Simanjiro	0	0	0	0
Kiteto	88	0	0	0
Total	0	0	0	0

11.60: Number of Agriculture Households by Source of Fingerling and District during the 2007/08 Agriculture Year- Manyara Region

District	Source of fingerlings							Total
	Own Pond	Government Institution	NGOs / Project	Neighbour	Private Trader	Natural pond	Other	
Babati	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

11.61: Number of Agriculture Households by Location of Selling Fish and District during the 2007/08 Agriculture Year- Manyara Region

District	where sold								
	Neighbour	Local Market	Secondary Market	Processing Industry	Large Scale Farm	Trader at Farm	Did not Sell	Other	Total
Babati	0	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0

11.62: Total Number of Fish Harvested, their weight and Quantity Sold by District during 2007/08 agriculture year- Manyara Region

District	Fish Harvested				Fish Sold	
	Number of Fish	%	Quantity(Kg)	%	Quantity (Kg)	%
Babati	0	0	0	0	0	0
Hanang	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0
Total	0	0	0	0	0	0

11.63: Total Number of Stocked Fish by Type and District during 2007/08 Agriculture year- Manyara Region

District	Mean Size of Pond (Sq.metre)	Type of Fish								Total
		Tilapia		Milkfish		Prawns/Crabs		Lulu		
		Number	%	Number	%	Number	%	Number	%	
Babati	0	0	0	0	0	0	0	0	0	0
Hanang	0	0	0	0	0	0	0	0	0	0
Mbulu	0	0	0	0	0	0	0	0	0	0
Simanjiro	0	0	0	0	0	0	0	0	0	0
Kiteto	0	0	0	0	0	0	0	0	0	0
Total	0	0	0.0	0	0	0	0	0	0	0

11.64: Number of Agricultural Households By frequency of stocking of Fingerings in fish ponds and District, 2007/08 Agricultural Year- Manyara Region

District	Frequency of stocking				Total
	1	2	3	8	
Babati	0	0	0	0	0
Hanang	0	0	0	0	0
Mbulu	0	0	0	0	0
Simanjiro	0	0	0	0	0
Kiteto	0	0	0	0	0
Total	0	0	0	0	0

11.65: Number of Agricultural Households By level of care of fish ponds and District, 2007/08 Agricultural Year- Manyara Region

District	Level of service of Dam				Total
	High	Meadium/Average	Low	Others	
Babati	0	0	0	0	0
Hanang	0	0	0	0	0
Mbulu	0	0	0	0	0
Simanjiro	0	0	0	0	0
Kiteto	0	0	0	0	0
Total	0	0	0	0	0

BEE KEEPING

**11.66 : Number of Agricultural Households involved in Honey Production/Collection and District, 2007/08
Agricultural Year- Manyara Region**

District	Agricultural Households Involved in Honey Production/Collection		Agricultural Households NOT Involved in Honey Production/Collection		Total	
	Number	%	Number	%	Number	%
Babati	4,897	7.7	58,919	92.3	63,816	100
Hanang	2,535	6.4	36,959	93.6	39,494	100
Mbulu	2,999	7.2	38,890	92.8	41,889	100
Simanjiro	171	.7	22,946	99.3	23,117	100
Kiteto	1,118	3.7	29,078	96.3	30,196	100
Total	11,721	5.9	186,791	94.1	198,513	100

**11.67: Number of Agriculture Households Harvesting Honey by Type of Bee and District during the 2007/08
Agriculture Year - Manyara Region**

District	Stingless Bee					Stingbee				
	Yes	%	No	%	Total	Yes	%	No	%	Total
Babati	0	0.0	158	100.0	158	4,423	90.3	474	9.7	4,897
Hanang	195	100.0	0	0.0	195	2,340	100.0	0	0.0	2,340
Mbulu	1,034	100.0	0	0.0	1,034	1,965	100.0	0	0.0	1,965
Simanjiro	0	0.0	0	0.0	0	171	100.0	0	0.0	171
Kiteto	224	100.0	0	0.0	224	895	92.3	75	7.7	969
Total	1,453	90.2	158	9.8	1,611	9,794	94.7	548	5.3	10,343

**11.68: Number of Bee hives by Type, Type of Bees and District during the 2007/08 Agriculture Year- Manyara
Region**

District	Stingless Bee				Sting Bee				Total
	Improved Bee hive		Local Bee hive		Improved Bee hive		Local Bee hive		
	Number	%	Number	%	Number	%	Number	%	
Babati	0	0	474	1	1,422	3	53,549	97	55,444
Hanang	0	0	780	3	0	0	22,526	97	23,306
Mbulu	4,861	23	5,896	28	931	4	9,205	44	20,893
Simanjiro	0	0	0	0	0	0	1,427	100	1,427
Kiteto	149,191	96	447	0	0	0	5,219	3	154,858
Total	154,053	60	7,597	3	2,353	1	91,926	36	255,928

11.69: Quantity of Honey Harvested and Sold by type of Bees and District during the 2007/08 Agriculture Year- Manyara Region

District	Stingless Bee				Sting Bee				Total	
	Honey Harvested		Honey Sold		Honey Harvested		Honey Sold		Honey Sold	Honey Harvested
	Quantity (Its)	%	Quantity (Its)	%	Quantity (Its)	%	Quantity (Its)	%		
Babati	0	0	0	0	278,011	100	361,256	100	361,256	278,011
Hanang	4,778	2	2,633	1	217,948	98	201,761	99	204,394	222,727
Mbulu	27,719	59	13,446	57	19,342	41	10,136	43	23,582	47,061
Simanjiro	0	0	0	0	11,987	100	9,703	100	9,703	11,987
Kiteto	2,013	5	596	4	41,007	95	15,881	96	16,477	43,020
Total	34,511	6	16,675	3	568,294	94	598,737	97	615,413	602,805

11.70: Average price of Honey (Tshs/litre) by Size of Bees and District during the 2007/08 Agriculture Year- Manyara Region

District	Stingless Bee (Price per Litre)	Sting Bee (Price per Litre)	Average Price Per Litre
Babati	0	1,223	1,184
Hanang	3,500	1,550	1,700
Mbulu	5,650	1,526	2,948
Simanjiro	0	1,333	1,333
Kiteto	2,167	865	1,125
Total	4,352	1,326	1,736

POVERTY MODULE

12.1 : Number of households reporting average number of rooms and type of building Materials and District, 2007/08 Agricultural Year- Manyara Region

District	Roofing Materials								
	Number of rooms	Iron Sheets	Tiles	Concrete	Asbestos	Grass/Leaves	Grass & Mud	Other	Total
Babati	3	30,170	316	316	316	30,328	2,369	0	63,816
Hanang	2	12,580	390	98	975	17,358	8,094	0	39,494
Mbulu	2	11,998	414	0	621	18,721	10,136	0	41,889
Simanjiro	2	8,733	114	0	57	12,158	2,055	0	23,117
Kiteto	2	21,175	75	0	75	2,908	5,890	75	30,196
Total	2	84,656	1,308	413	2,043	81,473	28,544	75	198,513

12.2: Number of households by type of Wall Materials and District, 2007/08 Agricultural Year- Manyara Region

District	Wall Materials								
	Grass	Poles and Mud	Sun-Dried Bricks	Baked Bricks	Wood, Timber	Cement Blocks	Stones	Other	Total
Babati	16,428	18,639	2,843	23,694	1,422	474	158	158	63,816
Hanang	11,799	13,847	4,681	8,484	98	293	195	98	39,494
Mbulu	13,549	20,272	1,241	4,241	1,138	0	207	1,241	41,889
Simanjiro	7,706	9,875	3,253	1,256	114	799	57	57	23,117
Kiteto	4,995	7,232	8,127	8,872	298	596	0	75	30,196
Total	54,478	69,866	20,146	46,547	3,069	2,162	617	1,628	198,513

12.3: Number of Agricultural Households reporting ownership of Assets by District, 2007/08 Agricultural Year- Manyara Region

District	Radio			Landline phone			Mobile phone			Iron			Wheelbarrow		
	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total
Babati	39,490	24,326	63,816	158	63,658	63,816	27,801	36,015	63,816	16,428	47,388	63,816	4,107	59,709	63,816
Hanang	20,186	19,308	39,494	683	38,811	39,494	12,385	27,109	39,494	10,142	29,352	39,494	3,121	36,374	39,494
Mbulu	16,445	25,444	41,889	517	41,372	41,889	8,998	32,891	41,889	8,998	32,891	41,889	2,275	39,614	41,889
Simanjiro	15,925	7,192	23,117	400	22,717	23,117	13,299	9,818	23,117	5,422	17,694	23,117	2,740	20,377	23,117
Kiteto	18,640	11,557	30,196	447	29,749	30,196	11,109	19,087	30,196	4,921	25,275	30,196	2,460	27,736	30,196
Total	110,686	87,827	198,513	2,205	196,308	198,513	73,593	124,920	198,513	45,911	152,601	198,513	14,703	183,809	198,513

cont... 12.3: Number of Agricultural Households reporting ownership of Assets by District, 2007/08 Agricultural Year- Manyara Region

District	Bicycle			Vehicle			Television / Video			Refrigerator			Motor Cycle		
	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total
Babati	38,858	24,958	63,816	2,527	61,289	63,816	948	62,868	63,816	948	62,868	63,816	1,738	62,079	63,816
Hanang	21,259	18,236	39,494	1,268	38,226	39,494	683	38,811	39,494	488	39,006	39,494	780	38,714	39,494
Mbulu	19,445	22,444	41,889	517	41,372	41,889	621	41,269	41,889	103	41,786	41,889	310	41,579	41,889
Simanjiro	12,843	10,274	23,117	2,397	20,720	23,117	1,142	21,975	23,117	685	22,432	23,117	1,655	21,462	23,117
Kiteto	16,999	13,197	30,196	2,088	28,108	30,196	1,044	29,152	30,196	596	29,600	30,196	1,566	28,630	30,196
Total	109,404	89,109	198,513	8,797	189,715	198,513	4,436	194,076	198,513	2,820	195,692	198,513	6,049	192,464	198,513

12.4: Number of Agricultural Households Reporting Main Source of Energy for Lighting by District, 2007/08 Agricultural Year- Manyara Region

District	Mains Electricity	Solar	Gas (Biogas)	Hurricane Lamp	Pressure Lamp	Wick Lamp	Candles	Firewood	Other	Total
Babati	948	158	158	16,902	948	43,597	158	790	158	63,816
Hanang	390	293	98	4,193	1,073	30,718	98	2,438	195	39,494
Mbulu	517	414	0	5,999	1,034	30,615	207	2,999	103	41,889
Simanjiro	457	400	57	6,507	514	13,984	114	913	171	23,117
Kiteto	447	447	0	9,171	895	17,372	75	1,640	149	30,196
Total	2,759	1,711	313	42,772	4,463	136,287	651	8,781	777	198,513

12.5: Number of Agricultural Households Reporting Main Source of Energy for Cooking by District, 2007/08 Agricultural Year- Manyara Region

District	Mains Electricity	Solar	Gas(Hh Biogas)	Bottled Gas(Industrial)	Parraffin / Kerosine	Charcoal	Firewood	Crop Residues	Livestock Dung	Other	Total
Babati	158	0	158	158	0	790	62,237	316	0	0	63,816
Hanang	0	0	0	0	195	780	38,324	195	0	0	39,494
Mbulu	0	0	103	0	0	414	40,235	1,034	103	0	41,889
Simanjiro	57	0	0	114	57	970	21,062	856	0	0	23,117
Kiteto	0	0	0	75	75	3,281	26,617	75	75	0	30,196
Total	215	0	261	347	327	6,235	188,474	2,476	178	0	198,513

12.6 : Number of Agricultural Households Reporting Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year- Manyara Region

District	Piped Water	Protected Well	Protected / Covered Spring	Upprotected Well	Unprotected Spring	Surface Water (Lake / Dam / River / Stream)	Covered Rainwater Catchment	Uncovered Rainwater Catchment	Water Vendor	Tanked Truck	Bottled water	Other	Total
Babati	21,641	14,216	2,527	8,688	7,424	7,266	316	1,738	0	0	0	0	63,816
Hanang	14,432	293	195	6,826	1,463	11,409	98	3,901	0	0	0	878	39,494
Mbulu	5,689	5,378	2,793	10,653	5,999	9,205	0	2,069	0	103	0	0	41,889
Simanjiro	4,167	1,998	1,256	1,827	5,480	5,651	114	2,283	114	171	0	57	23,117
Kiteto	3,206	671	1,566	7,232	3,952	6,859	298	4,399	0	0	0	2,013	30,196
Total	49,134	22,556	8,336	35,226	24,214	40,391	826	14,389	114	275	0	2,948	198,409

12.7: Number of Agricultural Households Reporting Distance to Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year- Manyara Region

District	Less than 100m	100-299 m	300-499 m	500-999 m	1-1.99 Km	2-2.99 Km	3-4.99 Km	5-9.99 Km	10Km and above	Total
Babati	4,739	11,847	0	21,325	23,536	0	2,369	0	0	63,816
Hanang	8,776	1,463	0	7,314	14,627	1,463	4,388	1,463	0	39,494
Mbulu	0	6,206	0	15,515	12,412	7,757	0	0	0	41,889
Simanjiro	1,712	0	0	2,569	7,706	6,849	2,569	856	856	23,117
Kiteto	3,355	1,118	1,118	7,829	8,947	6,710	1,118	0	0	30,196
Manyara	16,586	15,653	7,322	50,231	62,868	26,013	15,346	3,762	628	198,409

12.8: Number of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year- Manyara Region

District	Less than 10	10-19 Minutes	20-29 Minutes	30-39 Minutes	40-49 Minutes	50-59 Minutes	above one Hour	Total
Babati	2,369	7,108	2,369	30,802	0	2,369	18,797	63,816
Hanang	11,702	1,463	0	16,090	0	0	10,239	39,494
Mbulu	4,654	4,654	6,206	21,720	0	1,551	3,103	41,889
Simanjiro	0	0	0	5,993	856	856	15,411	23,117
Kiteto	0	1,118	2,237	10,065	1,118	1,118	14,539	30,196
Total	22,557	12,546	13,071	55,582	10,535	5,526	78,591	198,409

12.9: Number of Agricultural Households Reporting Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year- Manyara Region

District	Piped Water	Protected Well	Protected / Covered Spring	Uprotected Well	Unprotected Spring	Surface Water (Lake / Dam / River / Stream)	Covered Rainwater Catchment	Uncovered Rainwater Catchment	Water Vendor	Tanker truck	Bottled water	Other	Total HH
Babati	21,641	14,059	2,685	8,846	7,740	6,792	158	1,422	158	158	158	0	63,816
Hanang	16,675	195	98	10,824	2,828	7,314	195	1,268	0	98	0	0	39,494
Mbulu	5,792	4,965	2,586	12,101	5,792	9,205	0	1,448	0	0	0	0	41,889
Simanjiro	4,566	1,712	2,112	2,683	4,738	4,795	114	1,541	685	171	0	0	23,117
Kiteto	8,351	2,013	969	7,829	5,443	3,430	224	596	522	224	0	596	30,196
Total	57,025	22,944	8,450	42,283	26,644	31,536	691	6,275	1,365	650	158	596	198,616

12.10: Number of Agricultural Households Reporting Distance to Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year- Manyara Region

District	Less than 100m	100-299 m	300-499 m	500-999 m	1-1.99 Km	2-2.99 Km	3-4.99 Km	5-9.99 Km	10Km and above	Total
Babati	4,739	11,847	0	18,955	23,536	2,369	2,369	0	0	63,816
Hanang	4,388	0	1,463	5,851	10,239	5,851	4,388	5,851	1,463	39,494
Mbulu	0	4,654	0	12,412	13,963	6,206	3,103	1,551	0	41,889
Simanjiro	856	0	856	2,569	6,849	3,425	4,281	2,569	1,712	23,117
Kiteto	1,118	1,118	1,118	3,355	6,710	4,474	5,592	3,355	3,355	30,196
Total	14,573	14,689	6,900	48,558	59,523	27,078	18,475	7,126	1,695	198,616

12.11 : Number of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year- Manyara Region

District	Less than 10 Minutes	10 - 19 Minutes	20 - 29 Minutes	30 - 39 Minutes	40 - 49 Minutes	50 - 59 Minutes	above one Hour	Total
Babati	2,369	4,739	2,369	30,802	2,369	2,369	18,797	63,816
Hanang	7,314	0	1,463	7,314	1,463	0	21,941	39,494
Mbulu	3,103	3,103	7,757	17,066	0	1,551	9,309	41,889
Simanjiro	1,712	0	0	2,569	0	856	17,980	23,117
Kiteto	0	0	0	2,237	1,118	0	26,841	30,196
Total	14,498	7,842	11,589	59,987	4,951	4,777	94,868	198,513

12.12: Number of Agricultural Households Reporting type of TOILET the household normally use by District, 2007/08 Agricultural Year- Manyara Region

District	No Toilet / Bush	Flush Toilet	Traditional Pit Latrine	Improved Pit Latrine - hh Owned	Other Type	Total
Babati	2,053	316	57,656	3,791	0	63,816
Hanang	4,681	293	32,960	1,463	98	39,494
Mbulu	1,345	414	36,614	3,517	0	41,889
Simanjiro	12,386	228	8,219	2,226	57	23,117
Kiteto	5,816	224	22,666	1,491	0	30,196
Total	26,280	1,474	158,116	12,488	155	198,513

12.13: Number of Agricultural Households Reporting Number of meals the household normally has per day by District, 2007/08 Agricultural Year- Manyara Region

District	One	Two	Three	Total
Babati	632	18,008	45,177	63,816
Hanang	683	19,503	19,308	39,494
Mbulu	0	16,342	25,547	41,889
Simanjiro	2,055	9,760	11,302	23,117
Kiteto	149	15,359	14,688	30,196
Total	3,518	78,972	116,022	198,513

12.14: Number of Agricultural Households Reporting Number of days the household Consumed Meat during the Preceeding Week by District, 2007/08 Agricultural Year - Manyara Region

District	Not Eaten	One	Two	Three	Four	Five	Six	Seven	Total
Babati	21,325	29,381	9,162	2,685	948	158	0	158	63,816
Hanang	14,335	14,237	8,386	2,048	293	98	0	98	39,494
Mbulu	17,790	14,997	6,620	2,275	0	0	0	207	41,889
Simanjiro	3,938	8,961	6,792	1,427	1,199	400	57	342	23,117
Kiteto	5,443	12,526	8,649	2,386	820	373	0	0	30,196
Total	62,831	80,103	39,609	10,821	3,259	1,028	57	805	198,513

12.15: Number of Agricultural Households Reporting Number of days the household Consumed Fish during the Preceeding Week by District, 2007/08 Agricultural Year- Manyara Region

District	Not Eaten	One	Two	Three	Four	Five	Six	Seven	Total
Babati	21,483	20,693	8,214	7,898	2,527	1,106	632	1,264	63,816
Hanang	12,580	10,239	10,434	4,973	878	293	98	0	39,494
Mbulu	23,582	9,516	5,378	3,310	0	0	0	103	41,889
Simanjiro	11,130	6,964	2,569	1,027	514	57	171	685	23,117
Kiteto	10,587	13,868	3,802	1,342	224	373	0	0	30,196
Manyara	79,362	61,279	30,398	18,551	4,142	1,828	901	2,052	198,513







12.16: Number of Agricultural Households Reporting the status of food satisfaction of the household during the Preceeding Year by District, 2007/08 Agricultural Year- Manyara Region

District	Never	Seldom	Sometimes	Often	Always	Total
Babati	31,276	17,376	4,739	7,266	3,159	63,816
Hanang	13,165	18,236	3,218	3,608	1,268	39,494
Mbulu	10,550	17,376	6,620	4,551	2,793	41,889
Simanjiro	4,738	8,562	2,226	4,966	2,626	23,117
Kiteto	17,969	6,561	1,640	2,013	2,013	30,196
Manyara	77,697	68,110	18,443	22,404	11,858	198,513

12.17: Number of Agricultural Households Reporting Main Source of Income by District, 2007/08 Agricultural Year- Manyara Region

District	Sales of Food Crops	Sale of Livestock	Sale of Livestock Products	Sales of Cash Crops	Sale of Forest Products	Business Income	Wages & Salaries in Cash	Other Casual Cash Earnings	Cash Remittance	Fishing	Other	Not applicable	Total
Babati	25,748	5,529	1,896	10,267	0	6,792	1,422	9,478	2,369	158	158	0	63,816
Hanang	17,065	3,413	3,218	8,094	1,170	1,560	195	3,316	1,268	195	0	0	39,494
Mbulu	15,825	7,861	5,378	1,448	414	3,517	621	6,206	621	0	0	0	41,889
Simanjiro	11,473	6,336	1,598	628	57	1,370	228	1,142	57	228	0	0	23,117
Kiteto	20,802	3,802	596	224	0	1,789	0	2,759	149	0	75	0	30,196
Manyara	90,912	26,941	12,687	20,661	1,641	15,028	2,466	22,899	4,464	581	233	0	198,513

Appendix III: QUESTIONNAIRE

United Republic of Tanzania							
							
							
Small holder/Small Scale Farmer questionnaire							
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Agricultural Sample Census 2007/2008							
							
							
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Field level checking by: District Supervisor Name Signature Date / / Regional Supervisor Name Signature Date / / National Supervisor Name Signature Date / /	To be filled by the supervisor ONLY after Field/farm level checking of the enumeration process. This should be countersigned by the Supervisor in front of the enumerator						
District checking in Office District Supervisor Name Signature Date / /	All questionnaires must be checked at the district office.						
For Use at Regional Level Only Data entered by: Name Signature Date / / Queried Name Signature Date / /	See the back page for details of queries						
Ministry of Agriculture and Food Security, Ministry of Livestock and Fisheries Development, Ministry of Agriculture and Environment of Zanzibar, Ministry of Water and Irrigation, Prime Ministers' Office Regional Administration and Local Government, Ministry of Industry Trade and Marketing, National Bureau of Statistics, and the Office of the Government Statistician General of Revolution Government of Zanzibar							

Definition and working page for page 1

General Definitions

Who is a Smallholder /Small Scale farmer?

Should have one or more of the following: in the 2007/08 farming season had one or more cultivated and planted farms. The farm land may either be owned, rented, borrowed. The farmer may also be raising 1 and 50 head of cattle, and/or between 5 and 100 head of sheep/Goats/Pigs, and/or between 50 and 1000

Household: A group of people who occupy the whole or part one or more housing units and makes joint provision for food and/or other household items. Usually such a group comprises a husband, wife, and their children. Other relatives may be members of the household if they happen to live and get food provisions from the same household. People who live together and eat from the same pot may be considered as members of the same household even if they stay in separate dwellings. An individual who lives and eat alone is considered as an independent household.

Household Head: A person who is acknowledged by all other members of the household either by virtue of his age or standing in the household as the head. He/she should be a permanent resident of the house and he/she is the main person responsible for decision making regarding use of household resources..

Agricultural Holding: This is an economic unit of agricultural production under single management. This unit may have been grown various crops. For the purpose of the survey, the agricultural holdings are restricted to those which meet one of the following conditions:

- Having or operated at least 25 sq meter of arable land
- Own or keep at least one head of cattle or five goats/sheep/five pigs or fifty chicken/ducks/turkeys during the agricultural year 2007/08 (from October 2007 to September 2008).

Question Specific Definitions:

Type of Agriculture holding Codes (Q2.1):

Crops only: A holding is referred to be a crop only holding if it has cultivated at least one piece of land. This also applies to all households owning or have kept livestock whose number does not qualify such households to be an agricultural holding (No cattle, less than 5 goats/sheep/pigs, less than 50 chickens/turkeys/rabbits).

Livestock only: A holding is referred to be a livestock only holding if it has exercised livestock husbandry only during the 2007/08 agricultural year.

NOTE

For agricultural holding only and pastoralist holding only; the number of livestock should be at least one head of cattle, not less than five goats/sheep/pigs, not less than 50 chickens /turkeys /rabbits. This also applies to households having or operated less than 25 sq meter of cultivated land (which does not qualify the household to be considered as agricultural holding) but has the number of livestock that makes the holding qualifies to be considered as livestock holding.

Pastoralist holding: This refers to a household which practices livestock production as its major income generating activity and a means of subsistence, but moves from one place to another searching for water and pasture for the livestock. This movement usually involves long distances and in many cases the whole household unit moves with the livestock and they have no permanent place of residence.

Both crops and livestock: A holding is referred to be a both crops and livestock if it has cultivated a piece of land equal or exceeding 25 sq meter and if such households have own or kept livestock whose number qualify such household be considered as an agricultural holding.

Procedures for questions:

Q 2.1 Type of agriculture household/holding

Using the options under the question classify the type of agriculture household/holding

Note: If the household had an acre of crops and raised 40 chickens during 2007/08, it is classified as 'Crops only' as the number of chickens does not qualify the household as a livestock holding.

1.0 IDENTIFICATION DETAILS		Identification								
1.1	Location									
Na.	Location Name								Codes	
1.1.1	Rgion									
1.1.2	District									
1.1.3	Ward									
1.1.4	Village									
1.2	Deatails of the respondent or household head									
Na.									Codes	
1.2.1	Name and number of local leader									
1.2.2	Name and number of household head									
1.2.3	Sex of household head									
1.2.4	Name of respondent									
1.2.5	Relationship of Respondent to household head									
<p>Relationship to household head codes (Q 1.2.5)</p> <p>Head of Household1 Son /Daughter.....3 Grandson/Granddaughter.....5 No relationship.....7</p> <p>Spouse.....2 Father/Mother.....4 Other relatives.....6</p>										
2.0 ACTIVITIES OF THE HOUSEHOLD										
2.1	Typeof Agriculture Household									
<p>Household agricultural activities codes(Q 2.1)</p> <p>Crops only.....1 Livestock only2 Pastoralist.....3 Crops and Livestock4</p>										

Definition and working page for page 2
Question Specific Definitions:
Relation to head (Col 2):

Household Head: A person who is acknowledged by all other members of the household either by virtue of their age or standing as the household head.

Read and Write (Col 8)
Any other language: Must be a written language.

For someone who can read and write in Kiswahili and any other language apart from English, the correct code is 1. For one who can read and write in English and any other language apart from Kiswahili the correct code is 2. Code 4 should only be used for any other language which is not English or Kiswahili.

Education Level Reached (Col 10):

Ask the respondent the highest educational level reached. This aims at establishing whether at the time of enumeration the member of the household is studying has completed or has never studied. Make further enquiry for the level of education reached for those who have completed studies. Establish if the member had attained any training after graduation for the purposes for completing column number 9. For those who still continue attending studies during the period of this survey, establish their learning stage. For instance for a household member who studied up to Standard Three but did not complete his/her education at this level, then his/her highest education level reached is Standard Two. For those indicated under code 3 (not studied) in column 8 should be marked code 99 (Not applicable) in column 9.

Section 3.0 Note

Make sure that you define the hh proper to ensure that all the members of the hh are included. Ensure that you stress that the hh is not just the hh heads direct family and that it includes other people living and eating together with the family.

If you notice that the hh is large or you see many people around the hh and you have been given a smaller number of the hh members, make further enquiries until you are sure that you have captured all the hh members.

Section 3.0 Household information.

- ii) For each household member complete columns 1, 2, 3 and 3
After completing columns 1, 2, 3 and 3 for each household member, go back to the first household member and complete the remaining columns for that member.
- iii) Repeat step 2 for the rest of the household members.

3.0 HOUSEHOLD INFORMATION		Identification											
3.1 Give details of personal particulars of all hh members beginning with hh head		Not applicable for children under 5 years											
Na.	Names of hh members <i>(Start with hh Head)</i>	Ex Start with hh Head	Sex M = 1 F = 2	Age <i>(98 years or more enter 97, under one year old write 00)</i>	Marital Status	Parental Survival		Read and Write	Education status	Level of education attained	On farm engagements	Main activity	Off farm income yes=1 no=2
						Mother	Father						
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>	<i>(7)</i>	<i>(8)</i>	<i>(9)</i>	<i>(10)</i>	<i>(11)</i>	<i>(12)</i>	<i>(13)</i>
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Relationship to household head (Col 2)

Head of household.....1
 Female/Male.....2
 Son/Daugther.....3
 Father/Mother.....4
 Grandson/daughter....5
 Other Relatives.....6

Marrital Status(Col 4)

Married.....1
 Single.....2
 Co-habiting3
 Divorced
 Separated.....4
 Widow/widower.....5

Survival of Parents(Col 6 & 7)

Yes.....1 No2
 Dont't know3

Ed.uation Level(Col 9)

Studying1
 Has completed.....2
 Never been to school3

Reading and writing (Col 8)

Kiswahili.....1
 English2
 Kiswahili and English.....3
 Lugha nyingine.....4
 Canno tread or write.....5

Education Level (Col 10)

<u>Primary education</u>	<u>Secondary Education</u>
Below Standard One.....00	Form One.....11
Standard One01	Form Two12
Standard Two.....02	Fomr Three.....13
S tandard Three.....03	Form Four 14
S tandard Four.....04	Form Five15
S tandard Five.....05	Form Six16
S tandard S ix06	Training after Seo.ondary Ed....17
S tandard Seven.....07	University and other Tertiary Ed...8
Daras tandard E ight ..08	Adult
Education.....19	
Training after Primary Ed...09	Not applicable99
Pre Form One.....10	

Involvement in farming activitie (Col 11)

Works on farm full time.....1
 Works on farm part time....2
 Rarely works on farm.....3
 Never works on farm..... 4

Main activity (Col 12)

Crop farming:01.
 Livestock farming/herding: ...02.
 Pastoralist03
 Fishing04
 Fish farming05
 Paid employment/
 Government/parastal.....06
 Private/NGOs07
 Self employee (Off- farm cativities)
 - With employees08
 - Without employees09
 Non paid household member (off – farm activities)10.
 Unemployed but available for work11
 Unemployed but unavailable for work..12
 House mother13
 Student14
 Unable to work too old, too young, retired, disabled,child 15
 Others (specify)98

Off-farm Income (Col 13)

These are income made from activities NOT on the HH's farming activites. This can be from formal employemnt (e.g. in gpvrenment etc.), temporary jobs, casual labourers and income generation activity and includes working for cash on other people's farms. Indicate whether each member was involved in an off farm income generating activity during 2007/08

Definitions and working page for page 3**Definitions for Key Specific Questions****Section 4.1 – Land Access/Ownership**

These are areas that were used by the households for the 2007/08 farming season

Lease/Certificate of Ownership: Area under lease/certificate of ownership refers to the areas which were issued by the government. The household possesses government issued leasehold title or certificate of ownership. The land will normally be officially surveyed and boundaries marked. This includes leased land bought from others where the lease/certificate of ownership has been transferred.

Customary Law: This refers to the land which the household does not have an official government but its right of use is granted by the traditional leaders.

Bought: This refers to the areas of customary land that has been bought from others. This land does not have an official title and therefore is not leasehold.

Rented from others: Land rented from others for cash or for a fixed amount in crop produce (e.g. fixed number of bags at harvest).

Borrowed: use granted by land owner free of charge. Land owner can either be a lease holder or has right of access through customary law.

Share cropping: where the household is permitted to use land which is then paid for from a percentage of the harvested crop

Section 4.2 Land Use

Temporary crops: are sown and harvested during the same agricultural year

Permanent crops: are crops once sown or planted last for some years and need not to be replanted after each annual harvest.

Permanent crops /mixed crops: This is a mixture of permanent and seasonal crops. The two crops can either be randomly planted together or in a particular pattern e; for example intercropping (1 row of maize and 1 row of beans). A field that has been divided into plots for different crops is not mixed).

This is further subdivided into:

Mixture of Permanent crops – two or more permanent crops grown together

Mixture of Permanent and Temporary crops – permanent crop and annual crop together

Mixture of Temporary crops– two or more temporary, annual crops grown together

Pasture land: this is an area of owned/allocated land which is set aside for livestock grazing. It can be improved pasture where the farmer has planted grass, applied fertilized or where other means have been applied to improve the pasture. Or it can be natural pasture.

Natural Bush: Land which has naturally grown shrubs and trees and is considered productive but is not utilized for farming or livestock production.

Overview to section 4**Overview to section 4****Section 4.0: Preliminary note****Land Access/Ownership**

Land access/ownership refers to the area utilized by the members of the household. This does not include communal land where the resources are shared between household members. It does not include official communal land that the household has sole access to for example a plot for crop farming in the communal area.

Procedures for questions**Section 4.0 – Land Ownership**

1. Ask the respondent if he knows the total areas of land the household has sole access to. If he knows make a note in the calculation space
2. Ask the respondent the area of the different land ownership categories the household has sole access to (Q4.1, 1 to 4.1.7) and record in the appropriate spaces.
3. Add up the area of the different categories of land and compare it with the total area obtained in step 1 (if the respondent provided the information)
4. If the total area is different find out which one is correct and make

Section 4.2: Land Use

1. Ask the respondent the area of the different land use categories the household has sole access to (Q4.2.1 to 4.2.12) and record in the appropriate spaces.
2. Add up the area of the different categories of land and compare it with the total area obtained in section 4.0. The total area should be the same.
3. If the total area is different find out which one is correct and make amendments where appropriate.

4.0 LAND ACCESS/OWNERSHIP/TENURE				Identification <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>			
4.1 LAND ACCESS/OWNERSHIP/TENURE							
Give details on Area owned by the household during 2007/08 agricultural season.							
Give area as reported by the respondent in acres			Area in Acre				
					4.1.8 Was the whole household area used during the 2007/08 agricultural season? (Yes=1, No=2) <input type="checkbox"/>		
4.1.1	Area under certificate of ownership		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.1.2	Area owned under customary law		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.1.3	Area bought		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>		4.1.9 Do you consider to have enough land for your household? (Yes=1, No=2) <input type="checkbox"/>		
4.1.4	Area rented from others		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.1.5	Area borrowed from others		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.1.6	Area share cropped from others		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>		4.1.10 Is there any female who owns land or has customary rights to land ownership in this household? (Yes=1, No=2) <input type="checkbox"/>		
4.1.7	Area under other forms of tenure		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
Total area			<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2 LAND USE							
Area used by the household for various agricultural activities during 2007/08 agricultural season							
Enter area as reported by the respondent in acres			Area in acre		Working space for calculations		
4.2.1	Area planted temporary monocrops		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.2	Area planted temporary mixed crops (e.g. maize and beans)		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.3	Area planted permanent monocrops		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.4	Area planted permanent mixed crops (e.g. banana, coffee, trees)		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.5	Area planted permanent and temporary mixed crops (e.g. maize and banana)		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.6	Area under pasture		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.7	Area under fallow		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.8	Area under natural forest		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.9	Area planted trees		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.10	Area rented to others		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.11	Area unsuitable for agriculture		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
4.2.12	Uncultivated arable land (minus area under fallow)		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				
Total area			<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>				

Definitions and working page for page 4

<i>Working table for the calculation area for annual mixed crops</i>					
Mixed crops 1	Crop Name	Total area of mixed (acre)	Area for plants (acre)	Total number of plants	Total area of plants (acre)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*(e)
Permanent crop 1		0.000			
Permanent crop 2		0.000			
Permanent crop 3		0.000			
Permanent crop 4		0.000			
Total Area for mixed crops			Total area for permanent crops		
The remaining area for temp crops				%	Area for
				temporary	permanent crop
Name of the crop temp/permanent 1					
Name of the crop temp/permanent 2					
Name of the crop temp/permanent 3					
Check total area			Check total area for temporary crops		

Mixed crops	Name of plant	Total area mix (acre)	Area for the plant (acre)	Total of plants	Total area for plants (acre)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*(e)
Permanent crop 1		0.000			
Permanent crop 2		0.000			
Permanent crop 3		0.000			
Permanent crop 4		0.000			
Total area for mixed crops			Total area for permanent crops		
The remaining area for temp crops				%	Area for
				temporary	temporary crop
Name of the crop temp/permanent 1					
Name of the crop temp/permanent 2					
Name of the crop temp/permanent 3					
Check total area			Check total area for temporary crops		

Planted Area: Area in acre the household was able to plant

Harvested Area: Area in acre the household was able to harvest a large portion of harvests. this is the same as the area planted minus the area that was destroyed by floods/ pets /

Temporary/Annual Crops
Crops planted and harvested within 12 months after which time the plants die. Most annual crops are planted and harvested on a seasonal base.

Cash crop codes:

50	Cotton
51	Tobacco
53	Payrethrum
62	Jute
19	Seaweed

Crop Codes(Creal / Tubers/ Roots):

11	Maizei
12	Paddy
13	Sorghum
14	Buirush Millet
15	Finger Millet
16	Wheat
17	Barley
22	Sweet Potatoes
23	Irish Potatyoes
24	Yams
25	Cocoyamsi
26	Onions
27	Gingeri

Vegetable Codes:

86	Cabbage
87	Tomatoes
88	Spinach
89	Carrot
90	Chillies
91	Amaranths
92	Pumpkin
93	Cucumber
94	Egg plant
95	Water mellon
96	Cauliflower
06	Melllon
05	nyanyachungu
02	Ocra
03	Radish
01	Green Beans
04	Bizari

Instructions for calculating the area of mixed crops in a mixture

A. If the mixed crop is mixed annual ly only enter the total area of the field in the remaining area under temporary Crop and go to step one of these instructions.

B. If the mixed crop is mixed permanent and annual try to work tyhe percent age taken by the different crops and calculate the area of annual crops outlined in step 1. Otherwise use the number of trees method to calculate the area of annula crops in the mix.

C: Number of trees method to calculate annual crop areas in a permanent-annual crop mix.:

- (i) List each of the permanent crop in column b and enter the ground area per acre for each permanent crop (from instrctions for page 8) in column d.
- (ii) Enter the number of permanent trees in the mix in column e as will be provided to you by the respondent
- (iii) Calculate the area occpied by each crop by multiplying column d and collumn e and sum up these to obatin the total area of permanent crops in the mix.
- (iv) To obatin the area for tempofrorary crops , subtract (-) the area fro permanent crops from thne total area of crop mix and enter the result in in the total area under temporary crops.
- (v) Proceed to step 1 to calculate the area under each temporary crop.

1. Enter the name of each temporary crop in tyhe crop mix and estimate percentages of each crop.

2. Using the percentage for each crop, calculate the are for each crop from the remaining area under temporary crop.

3. After completing the excrcise for all the fields, sum the area of each crop in tyhe mix plus any monocrops and uenter the totals in section 5.1.1 Column 3.

4. Once the quantity harvested is obtained , caklculate the yields (metric tonnes/acre) and compare the figures with the norms given in the crops code box. If there is significantly difference, check the area and the amount harvested..

5.0	PERMANENT AND TEMPORARY CROP PRODUCTION															Identificatioon	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5.1	ANNUAL CROPS AND VEGATBLE PRODUCTION-SHORT RAINY SEASON																									<input type="text"/>					
Did your household palnted any crop duding short rainy season for 2007/08 agricultural year? Yes = 1, No = 2.(If the answer is yes proceed to Section 5.3)																															
5.1.1	Provide the following details for each crop planted during the short rainy season for 2007/08 agricultural year																														
Name of Crop	Planting		Main crop owner: Enetr the number of the hh member from page 2 on informati on for hh members	Use of Seeds					Irriga ted area	Pembejeo					Use of chemicals agaist weeds (If 6 is the answer in col 11 proceed to col 20)		Cost														
	Crop code	Actual area plnated (acre)		The type of seed plant ed	Use of seeds	Quantity		Cost (Tshs)		Cultiv ated area	Tye of fertili sers used	Quantity of fertilisers		Coist (Ths)	Cultiv ated areaE neol ilililot umik a	Qua naity of agrochemicals															
						Quant ity	Quantity used					Meas urement	Quantity used			Quant ity		Quantity used													
	(1)	(2)		(3)	(4)	(5)	(6)	(7)		(8)	(9)	(10)	(11)	(12)	(13)	(14)		(15)	(16)	(17)	(18)	(19)									
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>													
Total area planted <input type="text"/>																															
Type of seeds planted (Col 5) Local seeds ...1 Improved seeds.....2			Use of agricultural seeds (Col 6) For the whole crop.....1 3/4 of the whole crop.....2 1/2 of tyhe whole crop.....3 1/4 of td the whole crop.....4 Under 1/4 of the whole crop...5			Qunaity (Col 7) Kg1 Seedlings...2 Gram.....3			Use of farm inputs (SCol10,11 & 16) For the whole crop.....1 3/4 of the wholecrop.....2 1/2 of tyhe whole crop.....3 1/4 oftd the whole crop.....4 Under 1/4 of the whole crop...5 Not used6			Type of fertilisers (Col 12) Organic fertiliser.....1 Inorganic fertilisers.....2			Kipimo (S/wima 13) Kilo1 Lita.....2 Milli-lita.3																
Main crop owner: (Col 4) Enter number of hh member from page 2 on details on hh members in Q. 3			Quantity (Col 17) Kig1 Litre.....2 Gram.....3 Millilitre....6																												

5.2 ANNUAL CROPS AND VEGATBLE PRODUCTION-LONG RAINY SEASON CONTINUED ...															
5.2.1 Provide the following details for each crop planted during the short rainy season for 2007/08 agricultural year															
Identification <input type="text"/>															
Name of crop	Crop code	Use of fungicides (If 6 is the answer in col 20 proceed to col 24)				Use of pesticides (If 6 is the answer in col 24 proceed to col 28)				Harvesting and Storage			Marketing		
		Area used	Size		Cost	Area used	Size		Cost	Quantity harvested (kg)	Quantity stored (kg)	Main storage methods	Quantity sold (kg)	Where the crop mostly sold?	Main problems in crop marketing
			Quantity	Used			Quantity	Used							
(1)	(2)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)

Use of farm inputs (Col 20&24) For the whole crop.....1 3/4 of the whole crop.....2 1/2 of the whole crop.....3 1/4 of the whole crop.....4 Under 1/4 of the whole crop...5 Not used6	Quantity (Col 21&25) Kig1 Litre.....2 Gram.....3 Millilitre....6	Main Storage mechanisms (Col 30) Local storage facilities.....1 Improved Local storage facilities2 Modern store.....3 Open drums/sacks.....4 Cealed drums.....5 In heaps.....6 not Stored.....7 Other means (Specify).....8	Where the crop was sold(Col 32) Neighbours.....01 Private Businessman.....08 Open markets.....02 Contract farming.....09 Auctions.....03 Not sold.....10 Main Market.....04 Others98 Cooperative Union.....05 Farmers Association.....06 Large Scale farm.....07	Marketing problems (Col 33) Very low prices.....01 No problem11 No transport.....02 Others (Specify).....98 High transport costs.....03 Not applicable99 Lack of crop buyers04 Markets located far away ..05 Problems with farmers Associations 06 Problems with cooperative Unions7 Problems with Businessmen Association ...8 Strigent Government Conditions ...9
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Definitions and working page for page 5

Storage (Col. 30, Q 5.1.1):

- **Traditionally Made structures:** The design of storage structures villagers have inherited from forefathers .
- **Improved Traditionally made structures:** The design of traditional storagesrutures improved through modern technology.

Marketing Challenges Q 5.1.1 Col. 33:

- **Farmers' Association:** Village farmers who came together and started an association for the puporses of purchasing inputs/selling/storage of crops aiming at fetching better prices.
- **Cooperative Union:** A large inter-village/community set up in the district/ region or at national level for providing inputs, markets and storage of farmers' crops.
- **Government Regulatory laws for crops marketing:** Government instituted laws for regulatina transpotation and selling of crops.

Inputs (Q 5.1.1)

- Farm Yard Manure:** An organics fertiliser made on farm from animal dung. .
- Compost:** An organic fertiliser made on farm from decomposed plant materials.
- Insecticides:** This is the chemical usde in protecting plants or killing pests.
- Fungicides:** Protects plants from fungi attack.
- Herbicide:** Chemicals used to control or kills weeds.
- Improved seeds:** Scientifically attested to be suitable for agricultural use.

Working area/calculation space

Questions specific definitions

Q 5.1.1. Instructions on crops storage:

1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.
2. For the listed crops give explanations on storage.

Crops storage is keeping/reserving crops in a container or a special place for future use.

Q 5.1.1 Col 31

1. For each of crops listed indicate major marketing problems for 2007/2008 agricultural season.

Definitions and working page for page 6

Working table for the calculation area for annual mixed crops					
Mixed crops 1	Crop Name	Total area of mixed (acre)	Area for plants (acre)	Total number of plants	Total area of plants (acre)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*(e)
Permanent crop 1		0.000			
Permanent crop 2		0.000			
Permanent crop 3		0.000			
Permanent crop 4		0.000			
Total Area for mixed crops			Total area for permanent crops		
		The remaining area for temp crops		% of temporary	Area for permanent crop
Name of the crop temp/permanent 1					
Name of the crop temp/permanent 2					
Name of the crop temp/permanent 3					
Check total area			Check total area for temporary crops		

Mazao mchanganyiko 2	Name of plant	Total area mix (acre)	Area for the plant (acre)	Total of plants	Total area for plants (acre)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*(e)
Permanent crop 1		0.000			
Permanent crop 2		0.000			
Permanent crop 3		0.000			
Permanent crop 4		0.000			
Total area for mixed crops			Total area for permanent crops		
		The remaining area for temp crops		% of temporary	Area for permanent crop
Name of the crop temp/permanent 1					
Name of the crop temp/permanent 2					
Name of the crop temp/permanent 3					
Check total area			Check total area for temporary crops		

Planted Area: Area in acre the household was able to plant
Harvested Area: Area in acre the household was able to harvest a large portion of harvests. this is the same as the area planted minus the area that was destroyed by floods/ pets /

Temporary/Annual Crops
 Crops planted and harvested within 12 months after which time the plants die. Most annual crops are planted and harvested on a seasonal base.

Cash crop codes:
 Code Crop
 50 Cotton
 51 Tobacco
 53 Playrethrum
 62 Jute
 19 Seaweed

Crop Codes(Creal / Tubers/ Roots):
 Code Crop
 11 Maize
 12 Paddy
 13 Sorghum
 14 Buirush Millet
 15 Finger Millet
 16 Wheat
 17 Barley
 22 Sweet Potatoes
 23 Irish Potatoes
 24 Yams
 25 Cocoyamsi
 26 Onions
 27 Gingeri

Vegetable Codes:
 Code Crop
 85 Cabbage
 87 Tomatoes
 88 Spinach
 89 Carrot
 90 Chillies
 91 Amaranths
 92 Pumpkin
 93 Cucumber
 94 Egg plant
 95 Water melon
 96 Cauliflower
 06 Melliton
 05 nyanyachungu
 02 Oca
 03 Radish
 01 Green Beans
 04 Bizari

Crop Codes Legumes and Oil
 Code Crop
 31 Beans
 32 Cowpeas
 33 Green Gram
 34 Chick Peas
 35 Dengu
 36 Bambara nuts
 37 Njegere
 41 Sun flower
 42 Simsim
 43 Ground uts
 47 Soya beans
 48 Caster Seed

Instructions for calculating the area of mixed crops in a mixture
A. If the mixed crop is mixed annual ly only enter the total area of the field in the remaining area under temporary Crop and go to step one of these instructions
B. If the mixed crop is mixed permanent and annual try to work tyhe percent age taken by the different crops and calcualet the area of annual crops outlined in step 1. Otherwise use the number of trees method to calculate the area of annula crops in the mix.
C: Number of trees method to calculate annual crop areas in a permanent-annual crop mix.:
 (i) List each of tyhe permanent crop in collumn b and enter the ground area per acre for each permanent crop (from instructions for page 8) in collum d.
 (ii) Enter the number of permanent trees in the mix in collumn e as will be provided to you by the respondent.
 (iii) Calculate the area occupied by each crop by multiplying collumn d and collumn e and sum up these to obtain the total area of permanent crops in the mix.
 iv) To obtain the area for temporary crops , subtract (-) the area fro permanent crops from thne total area of crop mix and enter the result in in the total area under temporary crops.
 (v) Proceed to step 1 to calculate the area under each temporary crop.
1. Enter the name of each temporary crop in tyhe crop mix and estimate percentages of each crop.
2. Using the percentage for each crop, calculate the are for each crop from the remaining area under temporary crop.
3. After completing the excrise for all the fields, sum the area of each crop in tyhe mix plus any monocrops and uenter the totals in section 5.1.1 Collumn 3.
4. Once the quantity harvested is obtained , cakculate the yields (metric tonnes/acre) and compare the figures with the norms given in the crops code box. If there is significantly difference, check the area and the amount harvested..

5.3 PERMANENT/PERENNIAL CROPS AND FRUIT TREE PRODUCTION										Identification						
Does your household have any permanent/perennial crops or fruit trees Yes =1, No = 2, (If answer is NO proceed to Section 6.0)										<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
5.3.1 Give details on permanent/perennial crops or fruit trees																
Production Section																
Name of permanent/perennial crop	crop code of permanent/perennial crop/fruit trees	Monocrops Area for trees/seedling/branch/bushes	Mixed crops		Main crop owner: Enter the number of the hh member from page 2 on information for hh	Farm inputs										
			Area for mixed crops (Acre)	Number of Tplants/ trees in the crop mix of permanent and perennial crop		Uses of seeds			Cost (Ths)	Irrigation	Uses of Fertilisers (If 6 is the answer in col 13 proceed to col. 17)					
(1)	(2)	(3)	(4)	(5)	(6)	Type of planted seeds	Cultivated area	Quantity			Used	(10)	(11)	(12)	Area used	The type of fertiliser used

Type of seed planted (Col 7)
 Local seeds.....1
 Improved seeds.....2
 Don't know/ Not applicable...3

Main crop owner (Col 6):
 Enter the number of the hh member from page 2 on information for hh members in Q 3

Area cultivated (col. 8)
 For the whole crop.....1
 3/4 of the whole crop.....2
 1/2 of the whole crop.....3
 1/4 of the whole crop.....4
 Under 1/4 of the whole crop.....

Quantity (Col 9)
 Kg1
 Seedlings...2
 Gram.....3

Use of farm inputs (Col 12 & 13)
 For the whole crop.....1
 3/4 of the whole crop.....2
 1/2 of the whole crop.....3
 1/4 of the whole crop.....4
 Under 1/4 of the whole crop...5
 Not used.....6

Type of fertilisers (Col. 14)
 Organic fertiliser... ..1

5.3 PERMANENT/PERENNIAL CROPS AND FRUIT TREE PRODUCTION CONTINUED															Identification							
5.3.1 Give details on permanent/perennial crops or fruit trees during 2007/08 agricultural year																						
Name of crop	Crop code	Uses of weeds control chemical (If 6 is the answer in col 17 Proceed to col 21)				Use of fungicides (If 6 is the answer in col 20 proceed to col 24)				Use of pesticides (If 6 is the answer in col 25 proceed to col 29)				Crop harvesting and storage					Marketing			
		Area used	Size		Cost	Area used	Size		Cost	Area used	Size		Cost	Harvested area (acre)	Quantity of mature plants	Quantity harvested (kg)	Quantity stored (kg)	Njia Kuu ya kuhifadhi	Quantity sold (kg)	Main marketing problem		
			Quantity	Used			Quantity	Used			Quantity	Used									Quantity	Used
(1)	(2)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)		

Area used (Col 20&24)

For the whole crop.....1
3/4 of the whole crop.....2
1/2 of the whole crop.....3
1/4 of the whole crop.....4
Under 1/4 of the whole crop...5

Main storage mechanisms (Col 33)

Local storage facilities.....1
Improved Local storage facilities.....2
Modern store.....3
Open drums/sacks.....4
Cealed drums.....5
In heaps.....6
not stored.....7
Other means (Specify).....8

Marketing problems (Col 35)

Very low prices.....01 No problem.....11
No transport.....02 Others (Specify).....98
High transport costs.....03 Not applicable.....99
Lack of crop buyers.....04
Markets located far away...05
Problems with farmers Associations 06
Problems with cooperative Unions...7
Problems with Businessmen Association...8
Stringent Government Conditions...9

Quantity (Col 18, 22, & 26)

Kilogram....1
Litre.....2
Gram....3
Millilitre...6

Definitions and working page for page 7

Storage (Col. 30, Q 5.2.1):

- **Traditionally Made structures:** The design of storage structures villagers have inherited from forefathers .
- **Improved Traditionally made structures:** The design of traditional storagesrutures improved through modern technology.

Marketing Challenges Q 5.2.1 Col. 33:

- **Farmers' Association:** Village farmers who came together and started an association for the puporses of purchasing inputs/selling/storage of crops aiming at fetching better prices.
- **Cooperative Union:** A large inter-village/community set up in the district/ region or at national level for providing inputs, markets and storage of farmers' crops.
- **Government Regulatory laws for crops marketing:** Government instituted laws for regulatinq transportation and selling of crops.

Inputs (Q 5.2.1)

- Farm Yard Manure:** An organics fertiliser made on farm from animal dung. .
- Compost:** An organic fertiliser made on farm from decomposed plant materials.
- Insecticides:** This is the chemical usde in protecting plants or killing pests.
- Fungicides:** Protects plants from fungi attack.
- Herbicide:** Chemicals used to control or kills weeds.
- Improved seeds:** Scientifically attested to be suitable for agricultural use.

Working area/calculation space

Questions specific definitions

Q 5.2.1. Instructions on crops storage:

1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.
2. For the listed crops give explanations on storage.

Crops storage is keeping/reserving crops in a container or a special place for future use.

Q 5.2.1 Col 33

1. For each of crops listed indicate major marketing problems for 2007/2008 agricultural season.

Definitions and working page for page 8																																																																																																																																															
<p>Permanent Crops: These are crops once planted last longer in the farm and need not be replanted after each annual harvest. Most of the permanent plants include tress such as coconut tress, apple trees, grape trees, banana trees, pineapple trees etc.</p> <p>Number of Trees: These include manure trees and premature trees.</p> <p>Number of mature plants: A total of fruit bearing tress (e.g. mango trees, orange trees, avocado trees e.t.c).</p> <p>Instructions for permanent monocrops and crop mix: A. For a field with permanent monocrop enter farm size in collumn. 3. B. For a field with a permanent crop mix or a temporary crop mix, enter the number of trees only in collumn 4. C. For a field with a permanent crop mix /temporary annual crops , either: -Enter the area in collumn 4, if the total arae for permanent crops was obtained through calcuation of percentages of each crop OR Enter the number of tree in collumn 5, if the number of plants/ seedlings of permanent crops was excluded.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>21 Cassava: Cassava is a temporary crop, in order to simplify data collection on areas of production, data on cassava will be collected from areas under permanent crops.</p> </div>	<p>Permanent crops:(crop oils)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Code</th> <th>Crop</th> <th>Area per crop</th> </tr> </thead> <tbody> <tr><td>44</td><td>Palm Trees</td><td>0.00049</td></tr> <tr><td>45</td><td>Coconut tree</td><td>0.00037</td></tr> <tr><td>46</td><td>Cashew nut tress</td><td>0.00062</td></tr> </tbody> </table> <p>Permanent crops (Cash crops)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Code</th> <th>Crop</th> <th>Area per crop</th> </tr> </thead> <tbody> <tr><td>53</td><td>Sisal</td><td>0.00012</td></tr> <tr><td>54</td><td>Coffee</td><td>0.00049</td></tr> <tr><td>55</td><td>Tea</td><td>0.00037</td></tr> <tr><td>56</td><td>Cocoa</td><td>0.00049</td></tr> <tr><td>57</td><td>Rubber</td><td>0.00099</td></tr> <tr><td>58</td><td>Wattle</td><td>0.00099</td></tr> <tr><td>59</td><td>Kapok</td><td>0.00124</td></tr> <tr><td>60</td><td>Sugar-cane</td><td>0.00012</td></tr> <tr><td>61</td><td>Cardamon</td><td>0.00049</td></tr> <tr><td>63</td><td>Tamarin</td><td>0.00099</td></tr> <tr><td>64</td><td>Cinarmon</td><td>0.00124</td></tr> <tr><td>65</td><td>Nutmeg</td><td>0.00099</td></tr> <tr><td>66</td><td>Clove</td><td>0.00074</td></tr> <tr><td>18</td><td>Black pepper</td><td>0.00037</td></tr> <tr><td>34</td><td>Pigeon Peas</td><td>0.00025</td></tr> <tr><td>21</td><td>Cassava</td><td>0.00019</td></tr> <tr><td>75</td><td>Pineapple</td><td>0.00006</td></tr> <tr><td>86</td><td>Lemon Grass</td><td></td></tr> </tbody> </table>	Code	Crop	Area per crop	44	Palm Trees	0.00049	45	Coconut tree	0.00037	46	Cashew nut tress	0.00062	Code	Crop	Area per crop	53	Sisal	0.00012	54	Coffee	0.00049	55	Tea	0.00037	56	Cocoa	0.00049	57	Rubber	0.00099	58	Wattle	0.00099	59	Kapok	0.00124	60	Sugar-cane	0.00012	61	Cardamon	0.00049	63	Tamarin	0.00099	64	Cinarmon	0.00124	65	Nutmeg	0.00099	66	Clove	0.00074	18	Black pepper	0.00037	34	Pigeon Peas	0.00025	21	Cassava	0.00019	75	Pineapple	0.00006	86	Lemon Grass		<p>Permanent crops:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Code</th> <th>Crop</th> <th>Area per crop</th> </tr> </thead> <tbody> <tr><td>70</td><td>Passion Fruit</td><td>0.00074</td></tr> <tr><td>71</td><td>Bananas</td><td>0.00037</td></tr> <tr><td>72</td><td>Avocado</td><td>0.00099</td></tr> <tr><td>73</td><td>Mango</td><td>0.00099</td></tr> <tr><td>74</td><td>Pawpaw</td><td>0.00037</td></tr> <tr><td>76</td><td>Orange</td><td>0.00074</td></tr> <tr><td>77</td><td>Grape fruit</td><td>0.00074</td></tr> <tr><td>78</td><td>Grape</td><td>0.00012</td></tr> <tr><td>79</td><td>Mandarin</td><td>0.00074</td></tr> <tr><td>80</td><td>Guava .</td><td>0.00074</td></tr> <tr><td>81</td><td>Plums</td><td>0.00074</td></tr> <tr><td>82</td><td>Apples</td><td>0.00074</td></tr> <tr><td>83</td><td>Peaches</td><td>0.00074</td></tr> <tr><td>84</td><td>Mifyoksi</td><td>0.00074</td></tr> <tr><td>85</td><td>Lime/lemon</td><td>0.00074</td></tr> <tr><td>68</td><td>Pomelo</td><td>0.00099</td></tr> <tr><td>69</td><td>Jack Fruit</td><td>0.00074</td></tr> <tr><td>97</td><td>Durian</td><td>0.00074</td></tr> <tr><td>98</td><td>Bilimbi</td><td>0.00074</td></tr> <tr><td>99</td><td>Rambutan</td><td>0.00074</td></tr> <tr><td>67</td><td>Bread Fruit</td><td>0.00099</td></tr> <tr><td>38</td><td>Malay apple</td><td>0.00074</td></tr> <tr><td>39</td><td>Star Fruit (Sakua)</td><td>0.00074</td></tr> </tbody> </table>	Code	Crop	Area per crop	70	Passion Fruit	0.00074	71	Bananas	0.00037	72	Avocado	0.00099	73	Mango	0.00099	74	Pawpaw	0.00037	76	Orange	0.00074	77	Grape fruit	0.00074	78	Grape	0.00012	79	Mandarin	0.00074	80	Guava .	0.00074	81	Plums	0.00074	82	Apples	0.00074	83	Peaches	0.00074	84	Mifyoksi	0.00074	85	Lime/lemon	0.00074	68	Pomelo	0.00099	69	Jack Fruit	0.00074	97	Durian	0.00074	98	Bilimbi	0.00074	99	Rambutan	0.00074	67	Bread Fruit	0.00099	38	Malay apple	0.00074	39	Star Fruit (Sakua)	0.00074
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Definitions and working page for page 9

Storage (Col. 33, Q 5.3.1):

- **Traditionally Made structures:** The design of storage structures villagers have inherited from forefathers .
- **Improved Traditionally made structures:** The design of tradional storagesrutures improved through modern technology.

Marketing Challenges Q 5.3.1 Col. 35:

- **Farmers' Association:** Village farmers who came together and started an association for the puporses of purchasing inputs/selling/storage of crops aiming at fetching better prices.
- **Cooperative Union:** A large inter-village/community set up in the district/ region or at national level for providing inputs, markets and storage of farmers' crops.
- **Government Regulatory laws for crops marketing:** Government instituted laws for regulatina transportation and selling of crops.

Inputs (Q 5.3.1)

- Farm Yard Manure:** An organics fertliser made on farm from animal dung. .
- Compost:** An organic fertliser made on farm from decomposed plant materials.
- Insecticides:** This is the chemical usde in protecting plants or killing pests.
- Fungicides:** Protects plants from fungi attack.
- Herbicide:** Chemicals used to control or kills weeds.
- Improved seeds:** Scientifically attested to be suitable for agricultural use.

Questions specific definitions

Q 5.3.1. Instructions on crops storage:

1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.
2. For the listed crops give explanations on storage.

Q 5.3.1 Col 35

1. For each of crops listed indicate major marketing problems for 2007/2008 agricultural season.

Working area/calculation space

Definitions and working page for page 10

Investment in agriculture

Investment activities:

Investment activities refer to medium to long term farm development structures and projects. This can be irrigation structures, erosion control and water harvesting structures or other permanent or semi-permanent investment made on the land that the household owns.

Irrigated farming: Section 6.5:

Source of irrigation water (Col 1): The main source of the water used for irrigation.

Method of obtaining water (Col 2): The mechanism by which the water is extracted from the source

Irrigatable area (Col 3): The area the irrigation system is designed to cover in acreage

Area of irrigated land during the 2007/08 (Col 5): Area of land under irrigation during the 2007/08 agricultural year. This is the actual area and NOT the cumulative areas recultivated in 2 or more cropping seasons.

Farm Implements (Col. 1):

Machete : Include all implements use in tree cutting namely cicle, etc.

Sprinkler: The pump carried on the back or a hand used water pump

Hand used small tractor: A small tractor used in cultivation while the user walks on foot (see photo).



Section 6.2 Use of draft animals

Animals used in agricultural activities by the household during 2007/08 agricultural season.

Castrated Bulls: Castrated oxen meant for use in agricultural production.

Uncastrated Bulls: mature bulls used for garicultural activities but are not castrated.

Cow: Farmers also use mature female cattle in agricultural activities due to shortage of bulls

Donkey: Mature Male or female donekys are also used for agricultural production.

Q 6.5 Irrigation.

1. If a household uses irrigated farming give explanations aon source and method of obatinig water. .

2. See Col 10, Q. 5.1.1 and 5.2.1 and Col 12, Q 5.3.1 to see if irrigation was applied to any crop.

Farm implements, Q 6.1:

1. Collumn 2 Indicate whether or not inputs were used

2. Complete collumn 3 by entering the number of inputs used.

Farm inputs: Sections 6.3 and 6.4

1. Collumn 2 Indicate whether or not inputs were used.

2. Compelte collumn 3 by indicating where the inouts were obatined and collumn 4 by indicating the distance from where the inputs were obatined

Compost: An organic fertiliser made on farm from decomposed plant materials.

Insecticides: This is the chemical usde in protecting plants or killing pests.

Fungicides: Protects plants from fungi attack.

Herbicide: Chemicals used to control or kills weeds.

Improved seeds: Scientifically attested to be suitable for agricultural use.

Tractor tiller	<input type="checkbox"/>	<input type="checkbox"/>			6.2.6 Power Tiller	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																
Tractor hallow	<input type="checkbox"/>	<input type="checkbox"/>			6.3 USE OF ORGANIC FERTILISERS																																					
Castrated bulls	<input type="checkbox"/>	<input type="checkbox"/>			6.3.1 Give details on the use of organic fertilisers during 2007/08 agriculture year																																					
Uncastrated bulls	<input type="checkbox"/>	<input type="checkbox"/>			Type of fertiliser	Used	Yes=1, No=2	Quantity	Quantity used	Area used (Acre)																																
Cows	<input type="checkbox"/>	<input type="checkbox"/>			(1)		(2)	(3)	(4)	(5)																																
Donkeys	<input type="checkbox"/>	<input type="checkbox"/>			6.3.2 Manure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																
Shredding Machine	<input type="checkbox"/>	<input type="checkbox"/>			6.3.3 Compost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																
Power Tiller	<input type="checkbox"/>	<input type="checkbox"/>			<p>ACCES TO INPUTS</p> <p>Give details on inputs used during 2007/08 agricultural year</p> <table border="1"> <thead> <tr> <th>Name of inputs</th> <th>Used (Yes=1, No=2)</th> <th>Source</th> <th>Distance</th> </tr> <tr> <th>(1)</th> <th>(2)</th> <th>(3)</th> <th>(4)</th> </tr> </thead> <tbody> <tr> <td>Inorganic fertilisers</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Farm yard manure</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Compost</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Insecticides/Fungicide</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Pest and weeds control chemicals</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Improved seeds</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> <p>Source (Col.3) Government.....01 Cooperative Union.....02 Farm inputs store/market.....03 Auction.....04 Development project.....05 Corp buyers.....06 Large Scake farms.....07 Made by the household.....08 Form neighbour.....09 Cooperative Union.....10 Others98 Not applicable.....99</p> <p>KQuantity (Col 3) Kg.....1 Ton.....2</p> <p>Distance from the source (Cola 4) Under 1 kilometre.....1 Between One and three kilometres2 Between three and 10 kilometres3 Between 10 and 20 Kilometres4 Over 20 Kilometres.....5 Not applicable.....9</p> <p>Source of irrigation water (Col 1) River.....1 Wells4 Lake2 Deep wells.....5 Dams.....3 Cannals6 Tape water.....7</p> <p>Means of obtaining water(C0I2) Flwoing. (gravity).....1 Using a bucket.....2 Water pump (using hand or leg).....3 Electric /fuel driven pump/ mafuta.....4 Other (Specify).....8</p>						Name of inputs	Used (Yes=1, No=2)	Source	Distance	(1)	(2)	(3)	(4)	Inorganic fertilisers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Farm yard manure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Compost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insecticides/Fungicide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pest and weeds control chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Improved seeds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Improved seeds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																							
Oxen pulled plough for making terraces	<input type="checkbox"/>	<input type="checkbox"/>																																								
IRRIGATED FARMING					Did the household use irrigated farming during 2007/08 agriculture year? Yes=1, No = 2 <input type="checkbox"/>																																					
If the answer is yes proceed to Section 6.6																																										
Na.	Main source of water for irrigation	Main source of obtaining water	Area that can be irrigated (Acre)	Area irrigated during 2007/08 agriculture year (Acre)																																						
	(1)	(2)	(3)	(4)																																						
6.5.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																						

Definitions and working page for page 11**Q 6.6****The type of erosion control/Water harvesting (Col 1)**

Terraces: Structures constructed on mountain slopes to provide flat terrain for crop planting.

Erosion control bunds: these are bunks of earth/stones built perpendicular to the slope to slow down the speed of water and thus preventing soil erosion. Its differs from terraces in that the soils on these banks are not at ground level .

Gabions: A box like structure made of wire and filled with large stones to prevent gully erosion.

Sand bags: Are used in controlling and preventing gully erosion
Tree belt/wind breaks: Trees planted against the wind direction for breaking wind speed..

Section 7.0 Acces to credit for crop or livestock production

Credit refers to something provided in cash or in kind (such as farm inputs, machines, livestock and other things) for crop or livestock production. The value of the credit must be repaid back to the lender. An Interest may or may not be attached to the value of the credit

The credit may be repaid either in cash or through farm produce to be harvested .

In this question the enumerator is at liberty to inquire up to three sources of credit where the farmer accessed credit from more than one source.

Section 8.0 Agricultural Extension Services

Agricultural Extension Services: Refers to educational services provided to farmers by extension officers for the purposes of increasing crop and livestock production.

Share-cropping: Refers to farming where smallholder / Smallscale farmer enters into an agreement with large scale farmer where the former sells produce to the latter in exchange of provisions of farm inputs and the like. .

Contract farming Farming: Farming agreement entered between smallscale and large scale farmers with regards to markets of farm produce and provision of farm inputs

Q 6.6 Number of water harvesting structures and year of construction

1. The number water harvesting structures refers to the number of working / maintained structures and does not include derelict or irreparable structures.

2. Year of construction refers to the year in which the structures were built, and not the year the structures were last repaired. The year should be written in figures e.g. 1998, 2006.

Section 7.0 Source of agriculture credit

If the farmer obtained credit from more than one source the use the code from the list provided. Start with the main source of credit in Section "7.1.1".a

Section 8.0 Agricultural extension services

1. Ask if the household did receive agricultural extension services during 2007/08 agricultural season from the respondents listed in column 1, then enter column 2.

2. Complete all columns for every extension officer.

6.6 SOIL EROSION Identification <input type="checkbox"/>							
6.6.1 Did the household experience soil erosion during 2007/08 agriculture year? <input type="checkbox"/> (Yes=1, No=2)							
6.6.2 Did the household applied any methods for erosion contro/water harvesting during 2007/08 agricultural year? <input type="checkbox"/> (Yes=1, No =2) (If the answer is No, Proceed to Section 7.0)							
Na.	Mechanisms of controlling erosion/ Water harvesting (1)	Number of water harvesting (2)	Year of construction (3)	Type of erosion control/water harvesting (1)	Number of water harvesting (2)	Year of construction (3)	
6.6.3	Terraces	<input type="checkbox"/>	<input type="checkbox"/>	6.6.7	Tree belt	<input type="checkbox"/>	
6.6.4	Bunks for erosion control	<input type="checkbox"/>	<input type="checkbox"/>	6.6.8	Soil bunks of water harvesting	<input type="checkbox"/>	
6.6.5	Gabions/sand bags	<input type="checkbox"/>	<input type="checkbox"/>	6.6.9	Trenches	<input type="checkbox"/>	
6.6.6	Vetiva leaves	<input type="checkbox"/>	<input type="checkbox"/>	6.6.10	Other	<input type="checkbox"/>	
7.0 ACCESS TO ON FARM CREDITS							
7.1 Is there any household member who accessed on farm credit during 2007/08 agriculture year? Yes=1, No=2 (If answer is NO, Proceed to Section 7.2)							
SELECT UP TO THREE SOURCES AND PROCEED TO QUESTION 8.0 <i>(Source of credit Q 7.1.1, 7.1.2, 7.1.3)</i> Relative.....1 Saccos.....4 NGO/Development projects.....7 Bank.....2 Business/Shop.....5 Cooperative Union.....3 Private individuals.....6 Other.....9				Source of credit	7.1.1a	7.1.2a	7.1.3a
				Credit provided to	7.1.1b	7.1.2b	7.1.3b
				(Male=1, Female=2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2 IF THE ANSWER TO QUESTION 7.1 IS NO Give reasons for not accessing credit <i>Reasons for not accessing credit (Q 7.2.1) COL</i> Not required.....1 Did not to be indebted.....3 Did nott know how to access credit.....5 Credit delayed.....7 Did not credit existed.....9 Not available.....2 High interest rates.....4 Bureaucracy.....6 Other (Specify).....8							
8.0 ADVISORY SERVICES IN AGRICULTURE							
8.1 Did the household participate in outgrowers scheme during 2007/08 agriculture year? (Yes=1, No=2) <input type="checkbox"/>							
8.2 Did the household participate in the contract farming during 2007/08 agriculture year? (Yes=1, No=2) <input type="checkbox"/>							
8.3 Did your household receive agricultural advise on the following : (IF THE ANSWER IS NO IN COL 2 PROCEED TO THE FOLLOWING QUESTION)							
Na.	Advise on agriculture (1)	Received advice (Yes=1, No=2) (2)	Source of advise (3)				
8.3.1	Spacing	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.2	Use of agrochemicals	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.3	Soil erosion control	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.4	Use of organic manure	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.5	Matumizi ya mbolea za viwandani	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.6	Use of improved seeds	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.7	Use of modern farm implements	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.8	Irrigation	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.9	Crop Storage	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.10	Pest control	<input type="checkbox"/>	<input type="checkbox"/>				
8.3.11	Other (Specify)	<input type="checkbox"/>	<input type="checkbox"/>				
<i>Source of agricultural advice (Cokl. 3)</i> Government.....1 NGO/Development project.....2 Cooperative.....3 Large Scale farmer....4 Radio/Newspapers.....5 Neighbour.....6 Other source.....8							

Definitions and working page for page 12

Q 9.1 and 9.3 : What is required is to establish whether or not the household kept or raised the listed livestock during 2007/08 agricultural season (i.e. from October 2007 to September 2008). Also to establish the number of livestock as of 1st October 2008

Keeping or raising livestock is to keep livestock at home while providing the livestock with animal feeds and medication and other services. The livestock could be owned by the farmer or kept on behalf of relatives or neighbours .

Sections 9.1.1 to 9.1.7 Cattle

Note:

Q 9.1 is for the actual number of cattle owned or kept by the household (as of 1st October 2008). This number does not include herds of cattle kept on behalf by relatives or neighbours; that is, the cattle outside the residential area of the household under survey.

1. If the household keep mature fecund female cattle, it is expected that such a household will have calves which will be entered in question 9.1.6 or 9.1.7

Type of cattle (section 9.1.1 to 9.1.7)

Bull: Mature uncastrated male cattle used for breeding

Cow: Mature female cattle that has given birth at least once

Ox: Castrated male cattle used for farm work

Steer: Castrated male cattle used for meat

Heifer: Female cattle of 1 year up to the first calving

Section 9.3 Goat

Note:

Question 9.3 is for the actual number of owned or raised by the household (as of 1st October 2008) This number does not include goats kept on behalf by relatives or neighbours, that is the goat outside the residential area of the household under survey.

1. If the household has she goats, you would normally expect them to have kids

Type of Goat (Qs 9.3.1 to 9.3.5)

Billy Goat (he-goat): Mature Uncastrated male goat used for breeding

Castrated goat: Male goat that has been castrated

She Goat: Mature female goat over 9 months of age

9.0 LIVESTOCK (LIVESTOCK AND FISH)																													
9.1 CATTLE Identification <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>																													
Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No= 2 (If the answer is No proceed to Section 9.3) <input type="checkbox"/>																													
Number of cattle as of 1.10.2008																													
No.	Type of cattle	Number of indigenous cattle (2)	Number of improved cattle		Total (5)																								
			for meat (3)	Dairy (4)																									
9.1.1	Castrated bulls	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.1.2	uncastrated bulls	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.1.3	Cows	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.1.4	Steers	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.1.5	Heifer	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.1.6	Male calves	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.1.7	Female calves	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
Grand total					<input type="text"/>																								
9.1.8 What main methods do you use to identify your cattle? <input type="checkbox"/>																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="8" style="text-align: left; padding: 2px;">Cattle identificatio methods</th> </tr> <tr> <td style="padding: 2px;">Iron stamp (chapa moto).....1</td> <td style="padding: 2px;">Throat.....2</td> <td style="padding: 2px;">Ear/tail cutting.....3</td> <td colspan="5"></td> </tr> <tr> <td style="padding: 2px;">Colour.....4</td> <td style="padding: 2px;">Earings...5</td> <td style="padding: 2px;">Other8</td> <td colspan="5"></td> </tr> </table>						Cattle identificatio methods								Iron stamp (chapa moto).....1	Throat.....2	Ear/tail cutting.....3						Colour.....4	Earings...5	Other8					
Cattle identificatio methods																													
Iron stamp (chapa moto).....1	Throat.....2	Ear/tail cutting.....3																											
Colour.....4	Earings...5	Other8																											
9.2 Milk production: CATTLE																													
Na.	Season (1)	Type of cattle (2)	Number of milked cows (3)	Average of milk per cow per day (litre) (4)	Average number of days which your cows were milked (5)	Average price per litre per season (6)																							
9.2.1	Rainy	Improved	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																							
9.2.2		Indigenous	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																							
9.2.3	Dry	Improved	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																							
9.2.4		Indigenous	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																							
9.3 GOAT																													
Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No= 2 (If the answer is No proceed to Section 9.3) <input type="checkbox"/>																													
Number of goats as of 1.10.2008																													
No.	Type of goat (1)	Number of indigenous goat (2)	Number of improved		Total (5)																								
			for meat (3)	Dairy (4)																									
9.3.1	Male uncastrated goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.3.2	Male castrated goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.3.3	She goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.3.4	Male kid	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
9.3.5	She kid	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																								
Grand total					<input type="text"/>																								
Milk Production: GOAT																													
Na.	Season (1)	Number of ilked goats (2)	Average of milk per goat per day (litre) (3)	Average number of days which your she goats were milked (4)	Average price per litre per season (5)																								
9.3.6	Rainy	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																							
9.3.7	Dry	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																							

Definitions and working page for page 13

Q 9.1 and 9.3 : What is required is to establish whether or not the household kept or raised the listed livestock during 2007/08 agricultural season (i.e. from October 2007 to September 2008). Also to establish the number of livestock as of 1st October 2008

Keeping or raising livestock is to to keep livestock at home while providing the livestock with animal feeds and medication and other services. The livestock could be owned by the farmer or kept on behalf of relatives or neighbours .

Sections 9.4 Sheep

Note:

Q 9.4 is for the actual number of sheep owned or kept by the household (as of 1st October 2008). This number does not include sheep kept on behalf by relatives or neighbours; that is, the sheep outside the residential area of the household under survey.

1. If the the household keep ewes, it is expected that such a household will have calves which will be entered in question 9.1.6 or 9.1.7

Type of Sheepe (Section 9.4.1 to 9.4.5)

Ram: Mature Uncastrated male sheept used for breeding

Castrated sheep: Male sheep that has been castrated

Ewe: Mature female sheep over 9 months of age

Lamb: Young sheep under 9 months of age.

Section 9.5 Pigs

Note:

Question 9.3 is for the actual number of pigs owned or raised by the household (as of 1st October 2008). This number does not include pigs kept on behalf by relatives or neighbours, that is the cattle outside the residential area of the household under survey. .

1. If the household has she goats, you would normally expect them to have kids in column

Type of Pigs (Qs 9.5.1 to 9.5.5)

Boar: Mature Uncastrated male pig used for breeing

Sow: Mature female pig that has given birth to at least one ltter of pigs.

Gilt; Female pig of over 3 months up to the first farrowing

Piglet: Young pig less than 3 months of age

Identification <input type="text"/>					
9.4 SHEEP				9.5 PIGS	
Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No=2 (If the answer is No proceed to Section 9.5) <input type="checkbox"/>				Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No=2 (If the answer is No proceed to Section 9.6) <input type="checkbox"/>	
Number of sheep as of 1.10.2008				Number of pigsp as of 1.10.2008	
Na.	Type of sheep	Number of indigenous sheep	Number of improved		
	(1)	(2)	(3)	(5)	
9.4.1	Ram	<input type="text"/>	<input type="text"/>	<input type="text"/>	
9.4.2	Castrated sheep	<input type="text"/>	<input type="text"/>	<input type="text"/>	
9.4.3	She sheep	<input type="text"/>	<input type="text"/>	<input type="text"/>	
9.4.4	Male lamb	<input type="text"/>	<input type="text"/>	<input type="text"/>	
9.4.5	Female lamb	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Grand total			<input type="text"/>		
Na.	Type Pigs	Number of pigs			
	(1)	(2)			
9.5.1	Boar	<input type="text"/>			
9.5.2	Castrated male	<input type="text"/>			
9.5.3	Sow/Gilt	<input type="text"/>			
9.5.4	Male piglet	<input type="text"/>			
9.5.5	Female piglet	<input type="text"/>			
Grand total			<input type="text"/>		
9.6 OTHER LIVESTOCK					
	Type of animal	Number as of 1 October 2008	Number of eggs 2007/08 agriculture year		
	(1)	(2)	(3)		
9.6.1	Local chicken	<input type="text"/>	<input type="text"/>		
9.6.2	Layers	<input type="text"/>	<input type="text"/>		
9.6.3	Broilers	<input type="text"/>			
9.6.4	Ducks	<input type="text"/>	<input type="text"/>		
9.6.5	Guinea pigs	<input type="text"/>			
	Type of animal	Number as of 1 October 2008	Number of Eggs 2007/08 agriculture year		
	1	(2)	(3)		
9.6.6	Turkeys	<input type="text"/>	<input type="text"/>		
9.6.7	Rabbit	<input type="text"/>			
9.6.8	Donkeys	<input type="text"/>			
9.6.9	Horses	<input type="text"/>			
9.6.10	Dogs	<input type="text"/>			

Definitions and working page for page 14**Control of livestock diseases causing bugs**

Livestock worm control medicine: Medicine used to kill or control livestock on livestock . It is often used for cattle, goats, sheep and pigs.

Tiick: Is a dangerous bug that sucks blood form livestock and transmits animals diseases from one to the other animal.

Tse tse fly: A fly like bug that sucks blood from livetsock and transmits diseases sleewping sickness from one to the other animal.

Livestock advice (Section 9.8)

IA service provided by extension officers to livestock keepers for increasing livestock production.

9.7 LIVESTOCK DISEASES AND PEST CONTROL		Identificatio	
Did you livestock during 2007/08 agriculture year? (Yes=1, No=2) (If the answer is No proceed to Section 9.7.5		<input type="checkbox"/>	
Which animals did your deworm? (Yes=1, No =2, Not applicable=3 in the relevant box)		<input type="checkbox"/>	
9.7.1	Cattle <input type="checkbox"/> 9.7.2 Goat/Sheep <input type="checkbox"/> 9.7.3 Pigs <input type="checkbox"/> 9.7.4 Poultry <input type="checkbox"/>	<input type="checkbox"/>	
9.7.5 Do you experience tick problem with your livestock? (Yes =1, No = 2, Not applicable 3)		<input type="checkbox"/>	
9.7.6 How did you control tick problem? Control method (Q. 9.7.6): Dipping.....1 Spaying.....2 Application of medicine on back bone.....3 None..4 Other.....8		<input type="checkbox"/>	
9.7.7 Do you experience Tse tse problem with your livestock? (Yes =1, No = 2, Not applicable 3)		<input type="checkbox"/>	
9.7.8 How did you control Tse tse problem with your livestock? Control method (Q. 9.7.8): Dipping.....1 Spaying.....2 Traps.....3 None..4 Other.....8		<input type="checkbox"/>	
9.7.9 Do you experience Newcastle disease problem with your poultry? (Yes =1, No = 2, Not applicable 3)		<input type="checkbox"/>	
9.7.10 How do you control Newcastle disease problem with your poultry? Control/curative methods (Q. 9.7.10) Vaccination..1 Herbs....2 None..3		<input type="checkbox"/>	
9.7.11 Did you experience Fowl Typhoid with your poultry? Yes=1, No=2 , Not applicable=3		<input type="checkbox"/>	
9.7.12 How did you control/ cure Fowl Typhoid with your poultry? Control/curative methods (Swali 9.7.12) Vaccination..1 Herbs....2 Noe..3		<input type="checkbox"/>	
9.7.13 Were your cattle vaccinated against the following diseases? (Yes = 1, No = 2, Not applicable=3). 9.7.13 A: Foot and Mouth diseases <input type="checkbox"/> 9.7.13B: Skin disease <input type="checkbox"/>		<input type="checkbox"/>	
9.8 Extension services on livestock			
Did you receive the following extension advice on the following? (IF THE ANSWER IS NO IN COL 2 PROCEED TO THE FOLLOWING QUESTION)			
Na.	Livestock extension advice (1)	Received Extension advice (Yes=1, No=2) (2)	Source of Extension (3)
9.8.1	Feed and better feeding methods	<input type="checkbox"/>	<input type="checkbox"/>
9.8.2	Improved livestock shed (Goat, Dairy cattle, Poultry and pigs)	<input type="checkbox"/>	<input type="checkbox"/>
9.8.3	Milking and hygiene	<input type="checkbox"/>	<input type="checkbox"/>
9.8.4	Cattle fattening	<input type="checkbox"/>	<input type="checkbox"/>
9.8.5	Livestock diseases control	<input type="checkbox"/>	<input type="checkbox"/>
9.8.6	Livestock keeping in line with land availability	<input type="checkbox"/>	<input type="checkbox"/>
9.8.7	Pasture establishment and maintenance	<input type="checkbox"/>	<input type="checkbox"/>
9.8.8	Forming and strengthening groups/cooperatives	<input type="checkbox"/>	<input type="checkbox"/>
9.8.9	Calf rearing	<input type="checkbox"/>	<input type="checkbox"/>
9.8.10	Basics of production and use of improved bulls (AI)	<input type="checkbox"/>	<input type="checkbox"/>
9.8.11	Animals feed production	<input type="checkbox"/>	<input type="checkbox"/>
9.8.12	Other extension advice (Specify)	<input type="checkbox"/>	<input type="checkbox"/>
Source of agriculture extension (S/wima 3) SGovernment.....1 NGO/Development project.....2 Cooperative Union.....3 Large Scale farmer.....4 Radio/TV/Newspapers.5 Neighbour.....6 Other source8			

NOTE: If answers to Qs 9.1 to 9.6 is No (THAT IS THE HOUSEHOLD DOES NOT RAISE LIVESTOCK,) Proceed to q.9.9

Definitions and working page for page 15

General definitions

Fish farming: Refers to the rearing/production of fish. It is different from fishing in that in fish farming the fish have to be reared. While in fishing, fishing nets or traps are used to catch fish from rivers, lakes and the sea; thus fishing should not be included in this section

1

Question Specific Definitions (Q 9.9)

Production unit number (Col 1): A production unit is a pond river/lake which is treated as a separate entity for the production of fish eg it may be by virtue of manageable size, maturity of fish, tye of fish etc. eg. a farmer may have 3 fish ponds (each one is a separate production unit).

Frequency of stocking (Col . 5): What is the number of time the farmer puts new fingerlings into the pond each year.

Fingerlings: These are young immature fish used for stocking ponds.

Sols: (Col 10 & 11)

If no fish were sold enter "0" in column 10 and 11`

Fish sold (Col.12)

Kama hakuna samaki waliouzwa jaza "0" katika safuwima 12

Working space for page 15

9.9 FISH FARMING														Identification <input type="text"/>			
Did your household practice fish farming? Yes=1, No=2 (If the answer is no proceed to section 9.10) <input type="checkbox"/>																	
Give details on the fish farming during 2007/08 agriculture year																	
No.	Number of Ponds	Aina ya ufugaji	Square area of pond (m ²)	Source of fingerings	What is the frequency of stocking during the period?	Kiwango cha Huduma ya bwawa	Total number of stoked fish				Total number of fish harvested	Total weight of all fish		What is the main fish outlet?			
							Tialpia	Mwatiko	Crabs	Lulu		waliouliwa (kg)	waliouzwa (kg)				
							(1)	(2)	(3)	(4)		(5)	(6)		(7)	(8)	(9)
9.9.1	1																
9.9.2	2																
9.9.3	3																
Type of farming (SCol 2)		Standard of services to the pond (Col 6)		Source of fingerings (Col 4)				mainly sold to? (Col 14)									
Natural pond.....1 Small earth pond.....2 Large pond.....3 Other8		High leve1 Intermediate level.....2 Low leve.....3 Don't know.....8		From the pond.....1 Neighbour.....4 Government.....2 Business man.....5 NGO/Development Project...3 Natural Pond.....6 Other8				Neighbour...1 Auction.....3 Large Scale farmers.....5 Open market....2 Fish processing industry..4 Private business people6 Did not sell.....7 Other8									
9.10 HONEY PRODUCTION																	
Is there honey production/harvesting in your household? Yes=1, No=2 (If answer is no PROCEED to Section 9.11) <input type="checkbox"/>																	
Give details on honery harvesting during 2007/08 agriculture year																	
Number	Type of honey	Harvesting done? (Yes=1, No=2)	Number of improved bee hives	Number of local bee hives	Amount sold per year (Litres)	Amount of honey sold (litre)	Price per litre	Main market									
9.10.1	Small bees								Honey outlet Co 8 Neighbour...1 Auction.....3 Large Scale farmers.....5 Open market....2 Fish processing industry..4 Private business people6 Did not sell.....7								
9.10.2	Large bees																
9.11 AGRICULTURAL CHALLENGES																	
From the list of cahhalengs in farming on the right of the page, SELECT FIVE MAIN CHALLENGES WHICH constrain your development in agriculture																	
No	With first five priorities	Code	No	Important for	Code	LIST OF CHALLENGES											
	(1)	(2)		(1)	(2)												
9.11.1	Priority 1		9.11.4	Priority 4													
9.11.2	Priority 2		9.11.5	Prioty 5													
9.11.3	Priority 3																
01 Land availability 02 Land ownership 03 Poor farm implementso 04 Soil fertility 05 Availability of improved seeds 06 Irrigation services 07 Availability of agrochemicals 08 Cists of farm inputs 09 Extension services 10 Availability of forest resources 11 Huntin and collection problems 12 Water availability 13 Access to credits 14 Lack of off farm incomes 15 Harvesting problems 16 Kupukuchua 17 Crop stiorage 18 Crop processing 19 Market information 20 High transporation costs 21 Destructive animals 22 Crop thefy 23 Pests and diseases 24 Advice from Local government 25 Long dry spells 26 Conflicts between livetsock keepera and pastoralists																	

Definitions and working page for page 16**10.0 Household poverty indicators****Number of rooms used for sleeping in the household (Q 10.1.4)**

Include sitting room, dining room, kitchen, etc if used for sleeping.

It also includes rooms outside the main dwelling

A room is defined as a space which is separate from the rest of the building by a permanent wall or division. A building / house that is not divided into rooms is considered to have one room.

Household assets (Q 10.2):

These assets must be functional. Do not include if broken.

Access to drinking water (Q 10.4):

If there is more than one source use the one, which the hh uses most frequently.

Main source of hh cash income:(Q 10.7:





Activity that provides the hh with the most cash during 2007/08 agricultural season.

10.0 POVERTY INDICATORS		Identification <input type="text"/>																																			
<p>10.1 HOUSE CONSTRUCTION Specify materials used in the construction of the following sehemu zifuatazo</p> <p>10.1.1 Roof <input type="checkbox"/> 10.1.2 Floor <input type="checkbox"/> 10.1.3 Wall <input type="checkbox"/></p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <p>Roofing materials</p> <p>Iron sheets.....1 Tiles.....2 Concrete.....3 Asbestos.....4 Grass/Makuti.....5 Grass and mud....6 Other.....8</p> </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <p>Floor matials</p> <p>Earthen material.....1 Wood.....2 Wooden tiles...3 Tiles.....4 Cement.....5 Other.....8</p> </div> <div style="border: 1px solid black; padding: 2px;"> <p>Main materials</p> <p>Grass and pieces of woods.....1 Mud.....2 Wet bricks.....3 Burnt bricks...4 Wood.....5 Block bricks.....6 Stonese.....7 Bricks /Mawe ya kichanga.....8</p> </div> <p>10.1.4 Number of bedrooms <input type="text"/></p>	<p>10.2 Household property Does your household woen the following?, (Yeso=1 No =2)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>Property</th> <th>Yes=1, No=2</th> </tr> <tr> <td></td> <td>(1)</td> <td>(2)</td> </tr> </thead> <tbody> <tr> <td>10.2.1</td> <td>Radio (Radio, Radio Casette, music system)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>10.2.2</td> <td>Land line</td> <td><input type="checkbox"/></td> </tr> <tr> <td>10.2.3</td> <td>Celkl phone</td> <td><input type="checkbox"/></td> </tr> <tr> <td>10.2.4</td> <td>Iron</td> <td><input type="checkbox"/></td> </tr> <tr> <td>10.2.5</td> <td>Trolley</td> <td><input type="checkbox"/></td> </tr> <tr> <td>10.2.6</td> <td>Bycicle</td> <td><input type="checkbox"/></td> </tr> <tr> <td>10.2.7</td> <td>Vehicle</td> <td><input type="checkbox"/></td> </tr> <tr> <td>10.2.8</td> <td>TV/ Video</td> <td><input type="checkbox"/></td> </tr> <tr> <td>10.2.9</td> <td>Refrigerator</td> <td><input type="checkbox"/></td> </tr> <tr> <td>10.2.10</td> <td>Motorbike/vespa</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Number	Property	Yes=1, No=2		(1)	(2)	10.2.1	Radio (Radio, Radio Casette, music system)	<input type="checkbox"/>	10.2.2	Land line	<input type="checkbox"/>	10.2.3	Celkl phone	<input type="checkbox"/>	10.2.4	Iron	<input type="checkbox"/>	10.2.5	Trolley	<input type="checkbox"/>	10.2.6	Bycicle	<input type="checkbox"/>	10.2.7	Vehicle	<input type="checkbox"/>	10.2.8	TV/ Video	<input type="checkbox"/>	10.2.9	Refrigerator	<input type="checkbox"/>	10.2.10	Motorbike/vespa	<input type="checkbox"/>
Number	Property	Yes=1, No=2																																			
	(1)	(2)																																			
10.2.1	Radio (Radio, Radio Casette, music system)	<input type="checkbox"/>																																			
10.2.2	Land line	<input type="checkbox"/>																																			
10.2.3	Celkl phone	<input type="checkbox"/>																																			
10.2.4	Iron	<input type="checkbox"/>																																			
10.2.5	Trolley	<input type="checkbox"/>																																			
10.2.6	Bycicle	<input type="checkbox"/>																																			
10.2.7	Vehicle	<input type="checkbox"/>																																			
10.2.8	TV/ Video	<input type="checkbox"/>																																			
10.2.9	Refrigerator	<input type="checkbox"/>																																			
10.2.10	Motorbike/vespa	<input type="checkbox"/>																																			
<p>10.3 Energy use and availability in the hhousehold</p> <p>Main source of energy</p> <p>10.3.1 Lightning <input type="checkbox"/> 10.3.2 Cooking <input type="checkbox"/></p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <p>Nishati za Kuangazia</p> <p>Umeme.....01 Sola.....02 Gesi (biogas).....03 Taa ya kandili.....04 Karabai.....05 Kibatari.....06 Mishumaa.....07 kuni.....08 Nyingine.....98</p> </div> <div style="border: 1px solid black; padding: 2px;"> <p>Nishati za kupikia</p> <p>Umeme.....01 Sola.....02 Gesi (biogas).....03 Gesi (Kiwandani).....04 Mafuta ya taa.....05 Mkaa.....06 Kuni.....07 Mabaki ya Mazao.....08 Kinyesi cha.....09 Wanyama.....09 Nyingine.....98</p> </div>	<p>10.4 Availability of drinking water</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Season</th> <th>Main source of water</th> <th>Distance from source (km)</th> <th>Time spent waiting or going to and from the source (Hours)</th> </tr> <tr> <td>(1)</td> <td>(2)</td> <td>(3)</td> <td>(4)</td> </tr> </thead> <tbody> <tr> <td>10.4.1 Rainy</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>10.4.2 Dry period</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </tbody> </table> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> <p>Main sourece of drinking water Col. 2</p> <p>Tape water.....01 Water venders.....09 Artificial well.....02 Boozer.....10 Artificial spring.....03 Bottled water.....11 Openwell.....04 Other (Specify).....98 Natural spring.....05 Lake water, pond, river, stream n etc.....06 Covered Rain water harvesting well...07</p> </div>	Season	Main source of water	Distance from source (km)	Time spent waiting or going to and from the source (Hours)	(1)	(2)	(3)	(4)	10.4.1 Rainy	<input type="text"/>	<input type="text"/>	<input type="text"/>	10.4.2 Dry period	<input type="text"/>	<input type="text"/>	<input type="text"/>																				
Season	Main source of water	Distance from source (km)	Time spent waiting or going to and from the source (Hours)																																		
(1)	(2)	(3)	(4)																																		
10.4.1 Rainy	<input type="text"/>	<input type="text"/>	<input type="text"/>																																		
10.4.2 Dry period	<input type="text"/>	<input type="text"/>	<input type="text"/>																																		
<p>Note: Code01, Bomba kwa Zanzibar hujulikana kama Mfereji</p>																																					
<p>10.5 Toilet facilities</p> <p>10.5.1 What type of toilet does your hosuehold use? <input type="checkbox"/></p> <div style="border: 1px solid black; padding: 2px;"> <p>Type of toilet</p> <p>No toilet/in the buish.....1 Pit latrine....4 Flash toilet.....2 Other type (Specify).....8 Ordinal pit latrine.....3</p> </div>	<p>10.6 Eating patterns</p> <p>10.6.1 How many meals does your hosue usually get per day ? <input type="checkbox"/></p> <p>10.6.2 How days did the household eat meat last week? <input type="checkbox"/></p> <p>10.6.3 How days did the household eat fish last week? <input type="checkbox"/></p> <p>10.6.4 How many times did the household experience food shortages last year? <input type="checkbox"/></p>																																				
<p>10.7 Main source of household cash income?</p> <p>10.7.1 What are the sources of household income? <input type="text"/></p> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> <p>Code for source of income</p> <p>Selling food crops.....01 Sales of foerst products..05 Cash assinatce...09 Sales of livestock.....02 Business.....06 Fishingi.....10 Sales of livestock products.....03 Salaries.....07 Other.....98 Sales of cash crops...04 Casual labour.....08 None.....99</p> </div>	<div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> <p>Food shortage problems (Swali 10.6.4)</p> <p>Never.....1 Few times.....2 Sometimes.....3 Many times.....4 Often.....5</p> </div>																																				
<p>TIME OF FINISHING THE INTERVIEW</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Hour</th> <th>Minutes</th> </tr> </thead> <tbody> <tr> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </tbody> </table>		Hour	Minutes	<input type="text"/>	<input type="text"/>																																
Hour	Minutes																																				
<input type="text"/>	<input type="text"/>																																				

Average/maximum yields per area											
Use this table to compare the yields calculated in Sections 5.1, 5.2 and 5.3.											
These stats are strictly to be used as a guide for the purpose of assisting to get the correct area and yields for each crop.											
Name of Crop	Kilogram/ha		Kilogram/acre		Name of Crop	Kilogram/ha		Kilogram/acre			
	Average	Max	Average	Max		Average	Max	Average	Max		
11	Maize	1,150	6,250	466	2,530	86	Cabbage	20,000	50,000	8,097	20,243
12	Paddy	700	4,000	283	1,619	87	Tomatoes	25,000	60,000	10,121	24,291
13	Sorghum	750	3,500	304	1,417	88	Spinach	15,000	17,000	6,073	6,883
14	Bulrush Millet	350	3,000	142	1,215	89	Carrot	25,000	30,000	10,121	12,146
15	Funger Millet	300	2,500	121	1,012	90	Pepper	3,500		1,417	0
16	Wheat	1,150	4,500	466	1,822	91	Amaranthus	20,000	40,000	8,097	16,194
17	Barley	1,400	1,800	567	729	92	Pumpkin	35,000	40,000	14,170	16,194
16	Cassava	3,000	7,000	1,215	2,834	93	Cucumber	5,000	10,000	2,024	4,049
17	Sweet potatoes	600	8,000	243	3,239	94	Egg plant	30,000	60,000	12,146	24,291
18	Irish potatoes	750	8,500	304	3,441	95	Water melon	10,000	20,000	4,049	8,097
19	Yams	4,000	10,000	466	1,822	96	Caouliflower	17,000	20,000	8,097	16,194
25	Coco yams	2,500	5,000	567	729	52	Cotton	800	25,000	14,170	16,194
26	Onions	30,000	50,000	1,215	2,834	54	Coffee	500	100	2,024	4,049
27	Ginger	20,000	30,000	243	3,239	55	Tea	2,500	10,000	12,146	24,291
31	Maharè Beans	400	1,300	304	3,441	56	Cocoa	150	1,000	4,049	8,097
32	Cow peas	300	1,750	121	709	57	Rubber	400	1,400	6,883	8,097
33	Green gram	1,500	1,800	1,012	2,024	58	Wattle			324	10,121
34	Pigeon peas	600	1,500	243	607	59	Kapok			0	0
35	Chick peas	500	1,500	202	607	60	Sugar cane	60,000	150,000	24,291	60,729
36	Bambara nuts	600	4,000	243	1,619	61	Cardamon	3,000		1,215	0
41	Sun flower	600	1,700	243	688	71	Banana	10,000	50,000	4,049	20,243
42	Simsim	300	1,000	121	405	72	Avocado			0	0
43	Gound nuts	600	4,000	243	1,619	73	Mango	10,000	25,000	4,049	10,121
47	Soyabeans	1,300	2,500	526	1,012	74	Pawpaw	50,000	70,000	20,243	28,340
48	Caster seeds	300	750	121	304	76	Orrage	15,000	40,000	6,073	16,194
75	Pineapple	25,000	60,000	10,121	24,291	77	Grape fruit	30,000	50,000	12,146	20,243
50	Cotton	300	1,500	121	607	78	Grapes	5,000	30,000	2,024	12,146
51	Tobacco	500	1,500	202	607	79	Mandarin	15,000	40,000	6,073	16,194
53	Pyrethrum			0	0	80	Quava	7,000	35,000	2,834	14,170
62	Jute	800	3,500	324	1,417	81	Plums			0	0
44	Palm oil	1,150	5,000	466	2,024	82	Tufaha		20,000	0	8,097
45	Cononut	1,500	8,000	607	3,239	83	Pea	15,000	27,000	6,073	10,931
46	Cashw nut	9	60/tree	4	24	84	Pitches	14,000	57,000	5,668	23,077
						66	Clove	4,500	5,000	1,772	1,969
							Black pepper	2,000	3,750		
							Mung'unye				
							Ocra	1,000	1,500		

Appendix V

Community Level Questionnaire

ACQ 3	United Republic of Tanzania	CONFIDENTIAL	
			
			
Village/Community Level Formats Access to and Use of Community Resources Farm Gate Prices of commodities produced by the village			
		NUMBER OF FARMERS HH IN THE VIALAGE To be filled by the enumerator after completeing form ACLF2	
Agricultural Sample Census 2007/2008		NUMBER OF HH MEMBERS To be filled by the enumerator after completeing form ACLF2	
Region	Ward
District	Village
Enumerator Name Signature		Date of Enumeration	
d d / m m / y y y y		Hour Minutes	
Start Time		End Time	
Field level checking by:		I To be filled by the supervisor ONLY after Field/farm level checking of the enumeration process. This should be countersigned by the Supervisor in front of the enumerator	
District Supervisor	Name Signature Date / /		
Regional Supervisor	Name Signature Date / /		
National Supervisor	Name Signature Date / /		
District checking in Office		All questionnaires must be checked at the district office.	
District Supervisor	Name Signature Date / /		
For Use at Regional Level Only			
Data entered by:	Name Signature Date / /	See the back page for details of queries	
Queried	Name Signature Date / /		
Ministry of Agriculture and Food Security, Ministry of Livestock and Fisheries Development, Ministry of Agriculture and Environment of Zanzibar, Ministry of Water and Irrigation, Prime Ministers' Office Regional Administration and Local Government, Ministry of Industry Trade and Marketing, National Bureau of Statistics, and the Office of the Government Statistician General of Revolution Governemnet of Zanzibar			

Definitions and working page for page 3

Question Specific Definitions:

Obtain answers to the following questions from the meeting between the enumerator and influential farmers in the village
 Influential people can be Village Chairman, Village Government Executive Officer, Councillor, Ward Chairman, Extension Officer in the village or any other person in the village and who is well informed about village matters. It is important to not that these questions must be asked in groups (of more than one people) to obtain answers discussed and approved by many people.

Definitions of some specific terms

Access to community resources. Section 1.0

Community Resources: Resources in which the hh members have no individual claim to and which are shared together by all the village
Community Land: The area official demarcated by the village as shared/public land.
Squatting farmers Land: Communal land where individual hhs make sole claim to (for crop farming or fenced livestock) without official rights to ownership.
Available remaining Land: Official area of communal land minus areas of squatting farmers.
Government Land Reserve: Area set aside by the government as national reserve

Community tree planting scheme(Section 14.3)

Community Forest: A forest planted on the communal land which is planted, replanted or spt planted by the members of the village.
Plant Planting: An area designated by the village for planting a block of trees.
Spot Planted: Replanting an area where selective logging has been carried out. A tree is planted to replace the one that has been cut.
Indigeous Trees: Trees that are native to Tanzania
Exotic Trees: Trees that are not native to Tanzania

Non Government Organisation: Is managed by people from outside the village and it normally covers more than one village/District/Region. Its function is to provide deveoopment assistance to the farmer and is free from direct government links.

Village level organization: is managed by members of the village. Its purpose is normally to access/provide development assistance to the village

ACCESS TO COMMUNAL RESOURCES

1. ACCESS TO COMMUNITY RESOURCES										
1.1 Does the village set aside an area for communal resources e.g. forest, grazing, etc. (Yes =1, No =2) <input type="checkbox"/>										
<i>(If the answer is no proceed to 1.2)</i>										
Area of Community, Village, Ward resources					Area in acre					
1.1.1 Total area of communal land					<input type="text"/>					
1.1.2 Area of squatting farmers in communal land					<input type="text"/>					
1.1.3 Remaining available communal land					<input type="text"/>					
1.1.4 Government reserve land					<input type="text"/>					
1.2 UPAITIKANAJI NA MATUMIZI YA MALIASILI ZA JUMUIYA/KIJI/SHEHIA										
Community Resources		Distance from the resource in Km -season			Main Use		<p>Instructions on distance from the resource (Cols 2 and 3): Distance is estimated from the centre of the village. If under 1 km, enter 0 If above 1 km, enter whole number, e.g. 1.5km= 2km, 1.25km= 1km</p> <p>Main uses (Col. 4) Home or farm livestock consumption.....1 Sold to traders in the village.....2 Sold to the village market.....3 Sold to local wholesalers.....4 Sold to big wholesalers.....5 Not available.....6</p>			
		Dry		Rainy						
(1)		(2)		(3)		(4)				
1.2.1 Water for human consumption		<input type="text"/>		<input type="text"/>		<input type="text"/>				
1.2.2 Water for livestock		<input type="text"/>		<input type="text"/>		<input type="text"/>				
1.2.3 Communal grazing land		<input type="text"/>		<input type="text"/>		<input type="text"/>				
1.2.4 Communal firewood		<input type="text"/>		<input type="text"/>		<input type="text"/>				
1.2.5 Wood for charcoal burning		<input type="text"/>		<input type="text"/>		<input type="text"/>				
1.2.6 Wood for building poles		<input type="text"/>		<input type="text"/>		<input type="text"/>				
1.2.7 Forest for bee keeping (honey)		<input type="text"/>		<input type="text"/>		<input type="text"/>				
1.2.8 Hunting		<input type="text"/>		<input type="text"/>		<input type="text"/>				
1.2.9 Fishing		<input type="text"/>		<input type="text"/>		<input type="text"/>				
2.0 COMMUNITY PLANTED TREES										
2.1 Did your village have community planted trees during 2007/08 agriculture year? (Yes=1, No=2) <input type="checkbox"/>										
<i>If the answer is no proceed to Section 3.0</i>										
Details of the community tree planting scheme										
No.	Distance from the community forest	Forest Area (acre)	Type of Planting	Type of Trees	Source of seeds / Seedlings	Number of Years since the start of planting	Main uses 2007/08 agriculture year	Main uses of communal forest products		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
2.2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
Type of planting (Col. 3)		Source of seedlings (Col. 5)			Main Uses (Col. 7)		Main use of revenue (Col. 8)			
Plantation planting.....1		Seeds collection and planting.....1			Poles.....1		Village development fund.....1			
Spot planting.....2		Village Nursery.....2			Wood.....2		Household use.....2			
Type of trees (Col. 4)		Department of Forestry.....3			Charcoal.....3		Household Income.....3			
Indigenous trees.....1		Private Individuals.....4			Firewood.....4					
Exotic trees.....2					Other /Special.....5					
Both types.....3										
3.0 Non governmental Organisation (NGOs) Contact					4.0 Community Based Organisation					
3.1 Did any NGO visit the village during 2007/08 agriculture year? (Yes=1, No=2) (If no proceed to Section 4)					4.1 Did the village have any CBO during the 2007/08 agriculture year? (Yes=1, No=2) <input type="checkbox"/>					
No.	Type of NGO	Visited Yes=1, No=2	Number of visits	Distance to the office (km)	No.	Type of CBO Sub-1, Sub-2				
3.2	Extension/ Research	<input type="text"/>	<input type="text"/>	<input type="text"/>	4.2	Extension/ Research <input type="checkbox"/>				
3.3	Service /input provision	<input type="text"/>	<input type="text"/>	<input type="text"/>	4.3	Service /input provision <input type="checkbox"/>				
3.4	Community Development	<input type="text"/>	<input type="text"/>	<input type="text"/>	4.4	Community Development <input type="checkbox"/>				
3.5	Other	<input type="text"/>	<input type="text"/>	<input type="text"/>	4.5	Other <input type="checkbox"/>				
5.1 Did the village have Field farm schools during 2007/08 agriculture year? (Yes=1, No=2) <input type="checkbox"/>					5.2 Did the village participate in any research on crops/ improved livestock during in the village during 2007/08 agriculture year? (Yes=1, No=2) <input type="checkbox"/>					
5.3 Did the village have local ironsmiths during 2007/08 agriculture year? (Yes=1, No=2) (If the answer is 2 proceed to q. 5.5)					5.5 Did the village have any training centres on draft animals during 2007/08 agriculture year? (Yes=1, No=2) (If number 2 is the answer conclude the enumeration.) <input type="checkbox"/>					
5.4 Number of local ironsmiths <input type="text"/>					5.6 Number of training centres for draft animals <input type="text"/>					

Obtain answers to the following questions from the meeting of enumerator and key informants in the village. Key informants can be a village chairman, Village Local Government Executive Officer, Councillor, Ward Chairman, Village extension officer, or any knowledgeable member in the community. Where possible ask these questions to a group in order to reach a consensus. **The number should be below five people.**

Procedure: Administer this form after completing all smallholder questionnaires for the village.
 1. Copy the name of all crops from Sections 5.1, 5.2 and 5.3 grown in the village from smallholder questionnaires. This should also include livestock raised by the household from questions 9.1, 9.3, 9.4 and 9.5 and enter them in column 1 of this form. Also see codes for livestock below.
 2. Enter price estimates per kg in column 5 and 6.

Name of crop/livestock <i>(1)</i>	Code of crop/livestock <i>(2)</i>	Name of main crop <i>(3)</i>	Code of Main crop <i>(4)</i>	Type of measure <i>(5)</i>	Price of measure	
					Minimum Per year <i>(6)</i>	Maximum Per year <i>(7)</i>

- Type of livestock (Col 2)**
- Cattle01 Ducks.....07
 - Goat.....02 Turkey.....08
 - Sheep.....03 Rabbit.....09
 - Pigs.....04 Kanga.....10
 - Poultry.....05 Simbisi.....11
 - Donkeys.....06

- Main product - CROPS (sCol 4)**
- Cereals.....01 Flowers eg. Pyrethrum.....07
 - Green maize.....02 Vegetables.....08
 - Green leaves and stem.....03 Fruit.....09
 - Straw, dry stems etc.....04 Other.....10
 - Roots and tubers, etc.....05
 - Leaves (Tobacco etc).....06

- Main product - LIVESTOCK (Col 4)**
- Live animals.....01
 - Meat.....02
 - Milk.....03
 - Eggs.....04


- Q quantity (Col 5)**
- Kg.....1
 - Number.....2
 - Litre.....3
 - A portion/piece L4

Appendix V


Village Community Level formats

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ACL F 1



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Sub-village /ward leader listing from


Region _____ Code Ward _____ Code

District _____ Code Village _____ Code


Sub village leader Number (1)	Name of Ward village leader (2)	Number of Households		Comments (5)
		Form Office Register (3)	After enumeration (4)	
<input type="text"/>		<input type="text"/>	<input type="text"/>	
<input type="text"/>		<input type="text"/>	<input type="text"/>	
<input type="text"/>		<input type="text"/>	<input type="text"/>	
<input type="text"/>		<input type="text"/>	<input type="text"/>	

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ACL F 2



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Household listing from-for listing hh heads and agriculture activities

Region _____ Code Name of sub village leader _____

District _____ Code Name of sub village _____


Ward _____ Code

Village _____ Code

Household number (1)	Household head name (2)	Fields a (3)	Cattle				Goats (8)	Sheep (9)	Pigs (10)	Kuku/Bata/ (11)	Rabbit (12)	If the Response Qualifies X (13)	Farmer Serial Number (14)
			Total (4)	Bulls (5)	Cows (6)	Calves (7)							
			<input type="text"/>										
<input type="text"/>													
<input type="text"/>													

ACLF 3


UNITED REPUBLIC OF TANZANIA




National Agriculture Sample Census 2007/08

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Household listing for 15 selected farmers





Region _____ Code ward : _____ code Namba Sawia

District _____ Code village _____ code Hatua

SN	Sub-village leader Number	Name of sub-village leader	Name of selected head of household	Name of Household Head	Number of					
					Field	Cattle	Goat	Sheep	Pigs	Poultry
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)